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3

American Finance

Part First.—Domestic

American Finance

Part First.—Domestic

BY

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'SPAIN OF TO-DAY,' 'AMERICAN INDUSTRIAL PROBLEMS,' 'BRITISH ECONOMICS,' 'REGULATING THE MONEY MARKET,' 'THE BANK OF ENGLAND,' ETC.

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AMERICAN FINANCE.

INTRODUCTION.

THIS book is written specially for American readers, the most appreciative and sympathetic that any financial writer could wish for. The American people are making financial history on the largest scale of any nation. It is natural, therefore, that finance should be to them a living, working interest. Their practical activity keeps their minds open and alert. They are wholly free from the Cobden fetish which has paralysed economic science in England. They have courage enough to hear both sides of a question, and they take the trouble to judge for themselves. Neither are they afraid of honest independent judgment from others. Once on a time they were proverbially thin-skinned, but Jefferson Brick is as dead as Queen Anne. The Americans of to-day have become conscious of their national strength. They realise too well the greatness of

the future that awaits them to be unduly sensitive to foreign criticism. Whether it be good or bad, friendly or unfriendly, they know how to estimate it at its true value.

This book must by its very nature be critical, and there is a good deal in it which American readers will dissent from. But the author has every confidence in its receiving from them just, and even indulgent, consideration. When they cannot accept his conclusions they will give him credit for the hard honest work that has been spent on them. No one could study a subject as he has studied American finance for a quarter of a century without feeling a genuine interest in it. He may flatter himself that he has seen something of it in all its aspects and bearings. As a journalist he has traversed the American continent north and south, east and west. As a financier he has seen most of its financial institutions from the inside. It may also have been of some advantage to him to look at these institutions from a safe distance. There are things to be learned about American finance in Capel Court that cannot be picked up in Wall Street itself. It is only a few years ago that New York was a financial satellite of London. How long will it be before London becomes a financial satellite of New York?

Nor is it merely from a business point of view that a student of American finance may find some special advantages in London. There may

also be historical materials here, which, if they exist at all on the other side of the Atlantic, may not be so readily available. London has old libraries full of forgotten books and pamphlets relating to American affairs. If the archives of old City firms like the Barings were ransacked, many a curious relic might be found in them of American loans, railway schemes, and other financial operations. These were the seeds sown three-quarters of a century ago of what is now the greatest, the most vigorous, and also the most interesting organisation of human industry.

Economic America has just been discovered, or rather, it has just discovered itself. Till lately the idea prevailed that it was to grow in the ordinary grooves, and was to be like other countries, only much bigger. But that is not to be its prosaic destiny. It is to be a country of its own—a nation by itself,—a republic of a wholly new and peculiar type. Gradually it is breaking loose from all European models and precedents. It is building up a distinctive American life—larger, broader, and more strenuous than would be possible anywhere in the old world. It is developing a civilisation of vast distances, gigantic energies, immense resource, Napoleonic ambitions, Titanic rivalries,—and, may we add, terrific risks? Could any nation have a more dazzling, but at the same time more hazardous, future? Could any writer desire a more fascinating or inspiring theme?

No phase of American life, political, social, or financial, can be adequately discussed without an abiding sense of the momentous issues involved. The United States is manifestly destined to be phenomenal in all things—in prosperity and adversity, in its booms and its blizzards, in its virtues and its defects. It will have the biggest trusts, and the strongest anti-trust laws. It will array against each other stupendous combinations of labour and capital. Within its capacious bosom the Union will have room for the best and the worst forces of civilisation. The most public-spirited citizen will rub shoulders in it with the most grasping monopolist, the creator of values with the professional wrecker, the most conservative financier with the wildest gambler. Everything, good or bad, will be on a truly American scale.

But it does not follow that the United States is to rule the world simply because of its being the strongest and richest world power. Such, no doubt, is the hope and the ambition of many patriotic Americans. But these sentiments misconceive the true conditions of the case. The United States may be economically strong at home without being proportionately formidable abroad. It may, and most probably will, have an economic sphere of its own in which it can secure itself against foreign competition. But the more exclusive that sphere is made, and the more impenetrable it may be from outside, the

more closely will the United States be shutting itself up inside it. Nations that would be industrial world powers cannot have it both ways. They cannot hope to dominate home and foreign markets at the same time. The policy which renders their home market invulnerable is pretty sure to hamper their foreign trade, and still more their foreign finance. This is only poetic justice, otherwise what remnant of a chance would be left for the old world?

That the United States is, and probably always will be, a country by itself is particularly true of its finance. Its whole financial organisation is, with few exceptions, racy of the soil. It has been said, with a certain amount of historical truth, that the founders of the Republic borrowed their politics from France and their finance from England. Their successors, however, have changed all that very considerably. The political and financial doctrines of 1789 have both undergone many vicissitudes. Even our gold standard, the adoption of which in 1792 was a sort of parting compliment paid to the mother country, was not persistently adhered to. Many and varied experiments were made to improve on it before it was finally adopted, just a century and a quarter after the revolution.

There was more excuse for the vacillation shown on the banking question. The two attempts made to acclimatise an adaptation of the Bank of England were foredoomed to failure. They originated

in a mistaken idea that the banking system of an old country, small in area and densely populated, would suit a young country of vast area but sparse population. Though both the first and the second Bank of the United States fell victims to political passion, it may be doubted if they ever could have realised the ideal of their founders. No central bank, however strong its political supporters, and however capable its management, could have achieved the position in the United States that the Bank of England holds in this country. An American banking system had to be created, and would have ultimately emerged even in the teeth of the greatest obstacles and difficulties. Whether the national banks will completely satisfy all the future requirements of the case is doubtful, but at all events they are thoroughly American.

Alongside of the national banks, and not always working in perfect harmony with them, is the most distinctive of all factors in American finance—the independent Treasury. This has no counterpart in the old world, and can hardly be imagined flourishing anywhere but on its native soil. When a central national bank was found to be impracticable, there was no alternative but for the Government to do its own banking. The verdict of American opinion upon it is still far from unanimous, while from foreign opinion it has received very scant attention. It may have all the weaknesses and disadvantages with which

its critics are continually upbraiding it, but its strong points are even more obvious and undeniable. In financial or commercial crises a great reserve power, like the independent Treasury, standing calmly outside of the storm and ready to assist the shipwrecked, may be a veritable bulwark. Against the service it can render in perilous times, the money it may divert from banking and commercial channels should be a very moderate offset. Moreover, the amount of the balance that should be carried by the Treasury is a detail always open to discussion in relation to existing circumstances.

No review of the public finance of the United States would be complete without some reference, however brief, to the remarkable history of the national debt. It also has its American peculiarities. In the rapidity of its growth it startled the world, but the world was even more astonished at the rapidity of its liquidation. In the first overwhelming shock of the Civil War, American statesmen had to bow to the inevitable, and raise money as they could in any and every possible way that suggested itself. But when the crisis was over and they had recovered their nerves, they lost no time in getting back to normal conditions. Fortune favoured them in showering prosperity on the country. The people were able without a murmur to submit to heavy taxes. They literally swamped the Treasury with revenue, and unprecedented surpluses enabled the

Government to redeem millions of dollars of debt every year.

All this was a new and strange development. The readiness, and even eagerness, of the people to pay taxes contrasted strangely with their old antipathy to the tax-collector. In the revolutionary war—as in the war of 1812 and for many years after—they would borrow at any price rather than be taxed even in moderation. These were the days when "shin-plasters" and all sorts of rag-money passed from hand to hand as the popular alternative to taxes. In the end they proved very costly alternatives. But the greenback experiment during the civil war was such an object-lesson that the American people never needed another of the kind. From their old anti-taxation, anti-banking, anti-honest dollar craze, they rushed to the opposite extreme and became ardent admirers of a full and overflowing Treasury. It is now one of their proudest boasts that they are the largest holders of gold in the world.

The financial institutions of the United States, beginning with the independent Treasury and descending through a long series of sub-treasuries, mints, national banks, state banks, private banks, and finance houses to Wall Street, exhibit two general characteristics. They have all had a more or less chequered history, and most of them are still in a state of flux. The forms they may ultimately assume are still very problem-

atical. All that may be safely predicted of them is, that they will in any case be distinctively American. European experience has been of comparatively little help to them in the past, and it will have even less influence on their future. The many changes and new developments that lie ahead of them will, it is to be feared, carry them farther and farther away from European models. They may not, however, be always gainers by that, nor may Europe be always a loser.

For example, the extraordinary hold that the Americans had a few years ago on European markets was not altogether a healthy sign for either party. It was too one-sided to last long. Had it truly represented the relative power of the two industrial systems which were ranged against each other, there would have been nothing left for Europe but to bend its head to the American yoke. But international competition, whether political or commercial, is full of surprises. A good many of these may be awaiting the Americans in the sphere of international finance. When their Western states cease to be the granary of Europe, when their mineral resources begin to feel the terrible strain of prodigal demands on them, when their home consumption begins to trench on their exportable surplus, and when their imports of foreign luxuries and other articles they cannot produce at home begin to disturb the favourable balance

of trade which they regard with so much complacence,—then it will be time enough to speculate on their proper place among the nations.

In its fundamental outlines the domestic future of the United States may not be difficult to forecast. So long as its physical resources continue to appear practically inexhaustible, there will be ample material for all its industries, skilled and unskilled. While the character and the energies of its people remain as they are, its industries are bound to prosper. While the country overflows with prosperity it should be easily governed. With ordinarily good government there should be no rushing to violent and reckless extremes. The anarchy of excessive wealth may be as carefully restrained as the anarchy of excessive poverty. With clever management the two *bêtes noires* of the social menagerie may be kept from each other's throats. But if weak or corrupt administration were to allow either of them to get the better of the other, the United States might soon be as uncomfortable a place to live in as Russia itself.

The keystone of all modern administration, imperial, national, or municipal, is finance. The richer, more industrious, and more advanced a country is, its finance will be of greater importance to it. To the United States it is all-important. Nearly every interest it has turns on good finance. And nowhere can bad finance do greater harm. Nowhere is there more urgent

and continuous need to watch financial developments. The Treasury has to keep a vigilant eye on its receipts, especially when they seem inclined to droop. The banks have to be thinking all the time of their accruing liabilities and their reserves. Wall Street has to read between the lines of the weekly bank returns, and to trim its sails accordingly. Chicago has to keep one eye on wheat and the other on money. The speculator, in fact, speculates in money as well as in wheat or stocks. Even the land-boomer in the North-West is an accident of the money-market. He and all his kind have been rendered possible by a highly developed system of credit which may one day break down, and crush them by the thousand.

So far as the normal everyday business of the country is concerned, the United States has little to fear hereafter. Its current production and consumption are both so immense, that there must always be a big home market for the producer and a big home supply for the consumer. Whatever surplus there may be at any time has generally an ample choice of outlets abroad. The financing of this current trade is an easy matter. A Chicago banker once very truly said that advancing money on grain certificates was the safest kind of banking imaginable. Nearly if not quite as much safety might be claimed for advances on other staple produce. But in every case an important qualification is necessary. Such banking

is only safe and healthy while it is confined to the *bonâ fide* movement of produce. When it takes to financing speculative sales of imaginary produce then the safety ends, and something quite different takes its place.

The test question as regards this class of American finance is, What proportion does the fictitious part of it bear to the substantial part? However gigantic the staple crops of the United States may be, a comparatively moderate amount of money would suffice to market them, if they were allowed to proceed from farm to market without any speculative interference. It is the huge fabric of gambling and manipulation piled up on them by the way that calls for boundless supplies of currency, of credit, and of banking facilities. If the *bonâ fide* marketing of produce could be separated from the speculative marketing, there would be general surprise at the small amount of finance it would require.

In the case of securities the distinction between *bonâ fide* trading and mere gambling is still more striking. A very small percentage of the stocks bought in Wall Street are taken up by the purchaser, and conversely a very small percentage of the stocks sold are delivered by the seller. If all transactions were followed by actual transfer, their volume would contrast absurdly with the million and a half shares per day, proudly recorded at times in Wall Street reports. This, of course, is not peculiar to New York. It holds

equally true of the London Stock Exchange and of the Continental bourses, though on a much smaller scale. To some extent speculation is rendered necessary by the conditions of modern commerce, and however objectionable it may seem, it cannot be altogether avoided. National temperament may also have something to do with its excesses, but be these large or small, they are incidents of modern life which must be accepted as inevitable. We may regulate and even restrain it, but in order to do that we must first recognise and understand it.

Nowadays, so completely do the parasitical varieties of finance overshadow the natural forms, that the financial organisation of nearly every country is adapting itself more to the former than to the latter. The dividing line between what used to be called legitimate trading and speculative trading has become so faint as to be almost indistinguishable. Wherever there is business there must be speculation, for the one grows out of the other. Futile attempts have been made to draw ethical distinctions between them. Ordinary speculation differs from ordinary trading only in the larger degree of risk attending it. There are many lines of business in old and settled countries which can be carried on with a minimum of risk. In every young country there are necessary enterprises that can only be carried hrough under speculative conditions. Nothing more precarious could be imagined than

agricultural pioneering in the Canadian North-West, but money and human life are being staked on it with enthusiasm.

All pioneering, agricultural, industrial, or commercial, is in its very nature speculative. As the new field is opened up, business settles down into regular grooves, and speculative risks are eliminated. Then speculative methods should also be eliminated, but, on the contrary, they tend to multiply and to grow more complex. It is during the transition from pioneering to permanent industry that the speculator has his finest opportunities and makes the boldest use of them. This is the stage through which Canada is passing now, and through which the American North-West passed ten or fifteen years ago. One fine morning a newly settled province wakes up to find that it has suddenly come into a fortune, —that its dollar-an-acre land is worth five or six dollars, that its buried iron and copper ores have had a magician's wand waved over them, that its hitherto bankrupt railroads are earning handsome dividends, and that local credit has gone up two or three hundred per cent. A golden glamour descends upon it, and the speculative moths come fluttering round it.

Two parallel developments generally take place in such cases,—a large increase of trade and a still larger outburst of speculation. This kind of speculation has very little in common with the gambling of the wheat pit and the stock

market. It rests on a substantial basis of *bonâ fide* business, while wheat and stock gambling may be mere fooling with market prices. The United States has had much experience of both these kinds of speculation. It has had its genuine El Dorados in the West, and its fictitious El Dorados in New York. A very safe gauge of an American boom is the proportion of Western solidity there may be in it as compared with the Wall Street gas. That, as a rule, will depend on the age of the boom. In its infancy the solid West may predominate, but as it grows older Wall Street is pretty sure to get the upper hand.

This almost invariable tendency was particularly marked in the McKinley boom of 1896-1901 —the most brilliant chapter in American financial history. Its origin, its hard fight, and its final triumphs are equally unparalleled. In the collapse of 1893 values of all kinds had been, as they say in the prize-ring, knocked senseless. Two-thirds of the railroads had been so drastically reorganised, that no one except perhaps a few of the professional reorganisers could guess what the new securities were worth. Property of every kind—land, produce, minerals, merchandise—was down to zero. A single word changed the whole situation,—values went up and up, and the higher they rose the more eager were the buyers. At last the boom overreached itself, and came perilously near a general smash. But it was skilfully steered through the breakers, and

started again in smooth water. In 1902 it had another smart check, but after a few months' rest it rallied for a third campaign, which has eclipsed all the others in audacity and brilliance.

Here we have phenomenal prosperity combined with still more phenomenal inflation. Both developments are distinctively American, and cannot be imagined as happening in any other part of the world. No other country could furnish the speculator with such an immense basis of *bonâ fide* trade, and nowhere else could so giddy a fabric of artificial values have been built up on it. There is a certain harmony and proportion between the two gigantic movements. For an ordinary country with, say, half the population of the United States and less than half of its producing power to have attempted the stupendous combinations which have been engineered in New York during the past decade, would have meant speedy disaster. A series of English, French, or German billion-dollar trusts would soon meet with the fate of the South Sea Bubble. Like it, they would be inverted pyramids with their centres of gravity at the top.

It is not suggested for a moment that sky-scraping finance is more justifiable in New York than it would be in London or Berlin. We only point out in extenuation of its extravagance the large substratum of solid indisputable prosperity that underlies it. Without that it would be obviously mad, and even as it is, its sanity may

be open to doubt. If speculation has any ethical rules at all,—which many people deny,—one of them is that speculative markets should have genuine markets behind them, and that a safe healthy balance should always be maintained between the two. The application of such a rule would vary in every country. Where the *bonâ fide* production and distribution are small, speculation should be correspondingly limited. And where, as in the United States, *bonâ fide* production and distribution are huge, the area of speculation will of necessity be correspondingly enlarged. The whole question is one of relative basis. Speculative operations that would be absurdly top-heavy in London or Paris, may easily balance each other in New York or Chicago.

But when all due weight has been given to these qualifications and distinctions, the sinister fact will remain that speculative finance is to be the future peril of the American people. It may continue to expand while its natural basis contracts. A time may come when the American wheat trade will shrink so greatly in volume as to allow Chicago little more scope for dealing in futures than Liverpool has now. If Chicago should ignore the change and keep the "wheat pit" going at high pressure, something would have to give way. A time is also approaching when Wall Street will have a much-diminished supply of counters to gamble with. *Bonâ fide* investors will take away the good stocks, and one or two

financial blizzards may sweep away the rotten ones. What will Messrs Harriman, Gates, & Co. have to gamble with then?

We hope to show the reader that American finance has a very interesting and romantic past, which, however, pales before its momentous and mysterious future. It is a fascinating riddle for the statesman, the financier, and the scientific economist.

BOOK I.

ITS EVOLUTION

BOOK I.—ITS EVOLUTION.

CHAPTER I.

ITS FOUNDERS.

WHEN an institution has strongly-marked features we may safely infer that they have not been formed in a few years or even a few generations. If there be in the world an institution with strongly-marked individuality, it is American finance. It exhibits national characteristics which may be traced back through many generations of lawyers, politicians, and financiers. Some of them, in fact, are older than the Republic itself. The fathers of the Republic were to no small extent the founders of its finance. In Franklin, Alexander Hamilton, and even in Jefferson, there may be detected curious bits of family likeness to typical Americans of our own day.

Robert Morris, "Superintendent of Finance" to the Confederation, were he to come to life again, would find a natural and congenial place among the leaders of Wall Street. It demands little effort of imagination to picture Dr Franklin as chairman of a modern Committee of Ways

and Means. Alexander Hamilton, the organiser of the Treasury, might walk into the Treasury building to-day and see methods still in operation which he devised at the end of the eighteenth century. For Gallatin, who was Jefferson's first Secretary of the Treasury in 1800, and Gage, the most resolute opponent of paper money, and all the early Finance Ministers, living counterparts might easily be found.

And one general characteristic on which American finance prides itself to-day—its rapid development — was already evident in those days. At the Declaration of Independence in 1776 the Americans had neither financiers, nor financial resources, nor financial machinery. In the most literal sense they might have said, with a distinguished English statesman, that "they were perfect children in those matters." They would have been as little at home at the Treasury as was Lord Bute himself, of whom it is recorded in the Grenville Papers that he made the following confession to a friend of his unfitness for that uncongenial office. The King, he said,

> had urged him and compelled him to take first the seals of Secretary of State, and afterwards to come to the head of the Treasury: that he had been heartily tired of the first, and was now still more weary of the second, not knowing the language he was to hold or the manner of dealing with the monied people and the merchants.

The foundations of American finance may be

said to have been laid in three stages, each of which is symbolised by a typical American. The first stage was that of the Continental Congress, which steered the revolution through its first five critical years—1776 to 1781. Its historical representative was Franklin, who, though no financier, had in spite of himself to take an active part in its financial measures both at home and abroad. The second stage was that of the Confederation Congress, so-called, which came into existence with the Articles of Confederation in 1781, and was superseded in 1789 by the first Constitutional Congress. At this point a completely organised and equipped republic takes the place of the previous makeshifts.

For the representative financier of the intermediate period, Robert Morris is entitled to be selected. Though not a prominent politician like Franklin or a statesman like Hamilton, he was in his way a greater financial power than either of them. They were theorists, while he was a man of business. He handled money while they wrote about it. As to the man who best symbolises the third and last stage there can be no question. Alexander Hamilton's title to that distinction can never be challenged. He, more than any other leader of the revolution, has impressed himself on its economic and financial side. His share of the foundation-laying was more skilfully, resolutely, and successfully performed than any other, next to Washington's own.

Taking these three founders of American finance in their historical order, we begin with Franklin. The most notable fact in his financial record as a member of the Continental Congress is his tacit support of the original issue of credit notes, which ultimately became the greatest monetary rubbish the world has ever seen. What survived of it when Hamilton produced his funding scheme of 1790 was contemptuously offered one dollar of new six per cent bonds in exchange for every hundred dollars of paper. It may be said in Franklin's excuse that as a New Englander he had been brought up on paper money, and had carried on business with it for many years without experiencing any serious accident or inconvenience. But he was not a soft-money man in principle. He preferred hard dollars to soft ones when they could be got; and he drew the line at legal tender. If he spoke as strongly against that in Congress as he wrote against it in his later correspondence, he must have helped greatly to stave it off.

This much should be further noted in Franklin's justification, that after the first issue of credit notes he saw the danger of their being carried to excess, and raised an alarm. While he remained in Congress he earnestly preached caution, and at every new issue he advocated the adoption of safeguards. Among others he recommended that the notes should bear interest, and that definite provision should be made for their

redemption. This had been part of the original scheme, but when the time came to begin redeeming it was ignored. Writing from France in 1779 to a friend at home, Franklin thus explains his action in Congress as to the credit notes:—

The depreciation of our paper money must, as you observe, greatly affect salary men, widows, and orphans. Methinks this evil deserves the attention of the several legislatures, and ought if possible to be remedied by some equitable law, particularly adapted to their circumstances. I took all the pains I could in Congress to prevent the depreciation, by proposing, first, that the bills should bear interest. This was rejected, and they were struck as you see them. Secondly, after the first emission, I proposed that we should stop, strike no more, but borrow on interest for those we had issued. This was not then approved of, and more bills were issued. When from the too great quantity they began to depreciate, we began to borrow on interest, and I proposed, in order to fix the value of the principal, that the interest should be promised in hard dollars. This was objected to as impracticable, but I still continue of opinion that by sending out cargoes to purchase it we might have brought in money sufficient for that purpose as we brought in powder, &c.; and that though the attempt might have been attended with a disadvantage, the loss would have been a less mischief than any measure attending the discredit of the bills, which threatens to take out of our hands the great instrument of our defences. The Congress did at last come into the proposal of paying the interest in real money. But when the whole mass of the currency was *under way* in depreciation, the momentum of its descent was too great to be stopped by a power that might at first have been sufficient to prevent the beginning of the motion. The

only remedy now seems to be a diminution of the quantity by a vigorous taxation of great *nominal* sums which the people are more able to pay in proportion to the quantity and diminished value; and the only consolation under the evil is that the public debt is proportionably diminished with the depreciation, and this by a kind of imperceptible tax,—every one having paid a part of it on the fall of value that took place between the receiving and paying such sums as passed through his hands. For it should always be remembered that the original intention was to sink the bills by taxes which would as effectually extinguish the debt as an actual redemption.—Franklin to Samuel Cooper, Passy, April 27, 1779.

Treating the depreciation of Government paper money as an "imperceptible tax" is distinctly original. What have Dr Franklin's successors in that line been thinking of to overlook so shrewd an argument? Greenbacks appear in a quite new and respectable light when presented as an "imperceptible tax." The Doctor's currency principles seem to have varied with the course of events. When the war was not going well, he inclined toward conservative views like those indicated in the above extract. But when the war news was good, his estimate of the functions of paper money rose accordingly. In another letter to the same correspondent he speaks of the credit notes as a new talisman that had been discovered by the clever Americans for the discomfiture of the old country. When in this vein he wrote:—

The effect of paper currency is not understood on this side the water. And indeed the whole thing is a mystery, even to politicians: how we have been able to continue a war four years without money, and how we could pay with paper that had no previously fixed fund appropriated specifically to redeem it. This currency, as we may manage it, is a wonderful machine. It performs its office when we issue it; it pays and clothes troops, and provides victuals and ammunition, and when we are obliged to issue excessive quantities it pays itself off by depreciation.

It has been said that Franklin, even in his soft-money days, drew the line at legal tender. This applies, apparently, to his whole career before as well as after the war. In the colonial assemblies there was many a hard fight over legal tender notes, and he was consistently against them. During his first mission to England he occasionally refers to them in his correspondence, as, for instance, in the following extract of a letter written so early as 1767:—

I am glad you have made trial of paper money *not a legal tender.* The quantity being small, may perhaps be kept in full credit notwithstanding; and if that can be avoided, I am not for applying here again for a repeal of the restraining Act. I am afraid an ill use will be made of it. The plan of our adversaries is to render assemblies in America useless, and to have a revenue independent of their grants for all the purposes of their defence, and of supporting governments among them. It is our interest to prevent this. And that they may not lay hold of our necessities for paper money to draw a revenue from that article whenever

they grant us the liberty we want of making it a legal tender, I wish some other method may be fallen upon of supporting its credit.—Franklin to Joseph Galloway, August 8, 1767.

We may mention here, as an interesting historical fact, that the Americans, often as they were tempted to try legal tender paper, and near to it as they sometimes came, did not actually yield to the temptation till the greenback issue of 1862. Our last quotation from Dr Franklin shows him in one of his most sensible moods. His tersely expressed opinion that it is not abundance of currency but prudent use of it that makes wealth, is in the best style of Poor Richard:—

I am inclined to think with you that the small sum you have issued to discharge the public debts only, will not be materially affected in its credit for want of the legal tender, considering especially the extreme want of money in the province. You appear to me to point out the true cause of the general distress, namely, the late luxurious mode of living, introduced by a too great plenty of cash. It is indeed amazing to consider that we had a sufficient quantity before the war[1] began, and that the war added immensely to it by the sums spent among us by the Crown, and the paper struck and issued in the province, and now in so few years all the money spent by the Crown is gone away and has carried with it all the gold and silver we had before, leaving us bare and empty, and at the same time more in debt to England than ever we were.

[1] The war with France in Canada, 1758-63.

But I am inclined to think that the mere making of more money will not mend our circumstances if we do not return to that industry and frugality which were the causes of our former prosperity.

Finance was the weak point of the Continental Congress which guided the infant footsteps of the Republic, while it was still only an association of thirteen states, indifferently acquainted with each other, and not always on cordial terms. So conscious of this were the leading members, that they grasped at the desperate idea of getting a Finance Minister from England. Dr Price, the principal authority of the day on national debts, sinking funds, and kindred questions, was a friend of Franklin, and a warm supporter of the American cause. They sent him, through their envoys in Europe, a formal invitation "to become a citizen of the United States, and assist in regulating the finances of the new Government, for which a generous requital should be paid." The Doctor, however, declined on various grounds—"first, that he was not sufficiently qualified; second, that he was too old; and third, that he was bound to England by too many ties."

It was fortunate for the United States as well as for Dr Price that this quixotic proposal fell through. He was not at all the sort of man who would have served their purpose at that particular juncture. What the Continental Congress needed was a banker as well as a financier. It had no

money of its own to finance with. At the outbreak of the revolution, the total amount of specie in the thirteen treasuries was variously estimated at from eight to ten million dollars. It had no fixed income, as the state governments would not for a long time grant it any separate power of taxation. Even its modest request for a 5 per cent *ad valorem* duty on imports was refused by one or two states, and failed in consequence. In the whole eight years of the war it was not able to levy much more than five and three-quarter million dollars in taxes. All the rest of the war expenditure had to be borrowed or conjured up by issues of paper money.

Dr Price and his sinking fund tables would, we suspect, have been of little use to the Continental Congress in operations of that sort. They were much more in the line of Mr Robert Morris of Philadelphia, the prototype of Steel Trust finance. Like Dr Price, he too was an Englishman, his family having emigrated to Philadelphia when he was a boy of six years old. His successor, Alexander Hamilton, was also a British subject, having been born on the island of Nevis in the West Indies. Morris became a partner in one of the greatest shipping firms of that day—Willing and Morris—which traded all over the world. He had consequently a large stake in the dispute with the Home Government, but, as was natural for a man of his wealth and position, his first sympathies were on the side of legal authority.

It was not till the Boston massacre in March 1770 that he threw in his lot with the "patriots." When the news of the massacre arrived at Philadelphia he was presiding at a dinner of the St George Society—an association of English-born Philadelphians. He at once joined the "Committee of Safety," and put all his great commercial influence and resources at the service of the revolution. He became banker and Commissary-General for the armies in the field. His ships carried colonial produce down to the West Indies, and brought back arms, ammunition, and medicines. The business was very profitable as well as patriotic. His prices could not, in the circumstances, be severely scrutinised; and there may have been a certain amount of truth in the popular gossip of the day that his ships sometimes cleared £12,000 on a voyage. The managers of the International Maritime Company might be glad if they could sometimes say as much for their 15,000-ton steamers.

Apparently it was also Robert Morris who took the first step in opening financial relations with France and Spain. The French Government had their eye on the revolt from the beginning, but as yet they had made no definite overture to the patriots. There had been for some time in Philadelphia "a lame elderly gentleman of a dignified and military bearing," who was known by the name of M. de Bonvouloir,—a very suggestive name, whether real or assumed. Morris

held mysterious meetings with this elderly Frenchman, who encouraged the idea of sending an American agent to Versailles. One was sent accordingly—Silas Deane of Connecticut. The choice was not a happy one, but Congress was more fortunate in its later selections, which included Dr Franklin, John Adams, and John Jay.

What would be called nowadays a very interesting "deal" was arranged, Morris, no doubt, having the chief hand in it. American produce was to be shipped to French ports, Nantes in particular, and realised there. A supplementary part of the scheme was to obtain from the French Government liberal advances on these shipments. Dr Franklin was to negotiate them at Versailles, which he did most successfully, and the money was to reach the United States by underground channels, the most important of which was taken charge of by the king's own favourite, Beaumarchais. Many ships sailed from Philadelphia and other American ports, but few of them reached France. The English cruisers which swarmed in the Atlantic were too active for them. Willing and Morris were said to have lost a hundred and forty ships in this precarious trade, so that their gains in the West Indies may have all vanished on the Atlantic.

It is certain that at this critical stage of the war everybody, from General Washington to Morris himself, was in dire straits for money. Thanks to Franklin's importunity, a good deal

was squeezed out of the French Court, and an occasional loan was extracted from Dutch bankers, but most of that was required in Europe. Morris drew on Franklin without mercy, for he was being unmercifully drained himself. Congress, Washington, Lee, and Lafayette were all at him by turns, begging and imploring for money. On the day after the battle of Trenton Washington wrote that he must have another fifty thousand dollars at once, as the Connecticut troops, whose time was expired, threatened to return home if they did not get the bounty of ten dollars per head which had been promised them for re-enlistment.

Morris had just found ten thousand dollars to enable Congress to quit Philadelphia on the threatened entry of Lord Howe. He had literally to go out into the street to look for this additional fifty thousand, and Providence threw in his way a wealthy Quaker with whom he negotiated an advance "for a private purpose." He had to give his own note for it, as well as his word of honour. In sending the money to General Washington, he wrote:—

> I had long since parted with very considerable sums of hard money to Congress, and therefore must collect from others, which, as matters now stand, is no easy thing. I mean to borrow silver and promise payment in gold, and will then collect the gold in the best manner I can.

Mr Robert Morris was evidently at home in

all branches of speculation. He also possessed in a very high degree the most essential qualification for high finance—that of not being afraid to take risks. In fact, he took them almost as freely and light-heartedly as any of the billionaire brigade do now. Nor will the reader be surprised, perhaps, to learn that he came to utter grief in the end, but that was yet a long way off in his dramatic career. On the eve of the Declaration of Independence he was still the Mæcenas or, should we say, the Pierpont Morgan, of the revolution? He was a member of the Continental Congress, and the hospitality he lavished on his fellow delegates doubtless enhanced the influence which his business capacity entitled him to.

CHAPTER II.

ITS FOUNDERS (*continued*).

To do Morris justice, he was more prudent and conservative as a Congressman than as a merchant prince. In the prolonged discussions on constitutional, military, and financial questions he was invariably on the solid side. He persistently opposed the many repudiation schemes introduced by the backwoods delegates. He insisted on public credit being maintained, for no one knew better than he did that the issue of the struggle depended on it. Rag-money, in its varied forms and disguises, he condemned both in Congress and in his own state legislature of Pennsylvania. The rag-money man, of course, insinuated that he preferred hard money because it paid him best. He was almost the only man who could find specie when it was urgently needed. We have seen how the fifty thousand dollars he sent to Washington after the battle of Trenton enabled the General to follow up his victory. A similar service rendered to him during the siege of Yorktown enabled him to maintain the

siege in face of great difficulties, and to end the war.

Morris, though he strongly objected to Congress paper, was himself a very liberal manufacturer of commercial paper. This was almost unavoidable in the circumstances. To carry on his immense private business required a large volume of floating bills. With all these public loans to finance as well, he must have been continually drawing and discounting. It was said when the war closed that his name was on Government paper to the amount of nearly a million and a half of dollars. Congress could not settle with him, and even if it had been able, his accounts were in such a state of chaos that no accountant could straighten them out to be fit for presentation. They never were properly presented, much less settled, and whether he lost by the Government or the Government by him, is a long-buried mystery.

But Congress still had faith in him, for when the Board of Treasury was abolished in 1781 he was offered the position of Superintendent of Finance, with the proud title of Financier of the United States. Rather reluctantly he accepted it, as it involved his retirement from business. With quixotic generosity he continued to endorse bills for Congress, and to make advances to the army. One of his first acts was to remit a considerable sum to General Washington. He organised the Bank of North America, the first of the three official banks which the political wild

cats killed one after the other. He himself subscribed ten thousand dollars of its capital, and was consequently one of the heaviest losers by it.

Morris soon got the public finances into almost as great confusion as his own. He had undertaken too much, and after a few years of harassing and unsatisfactory labour, he gave it up in despair. But for the help of Alexander Hamilton, who took over the thankless office in 1789, he might not have been able to hold out as long as he did. The situation altogether was fast becoming impossible. The Continental Congress had never been a government in any proper sense, and it was now merely a central committee which the state governments treated just as it suited them, or as the humour struck them. It made desperate appeals to them for funds, which they treated most callously. After the conclusion of peace they became more and more cavalier. Between 1781 and 1786 requisitions were made on them for more than ten million dollars, to which they grudgingly responded with two and a half millions. Latterly they would not even furnish it with money enough to cover the interest on the foreign debts it had been forced to contract during the war.

The Union has passed through many periods of peril: but the most perilous of all, not excepting the secession crisis, was the interregnum between the final triumph of the revolution and the adoption of the constitution. From 1783 to

1789 was the parting of the ways for the infant republic. The issue trembled in the balance whether it was to become a nation or to remain a mere confederacy. In the latter case it would certainly have broken up, and perhaps at no very distant date. In one of the many conventions then held, a proposal was made, and seriously discussed, that the states should group themselves in three republics. The champions of state rights held the key of the situation. Their position was impregnable both in law and in fact. They controlled the governments and the treasuries of their respective states. There was no reason except pure public spirit and a high ideal of the national future to induce them to surrender to Congress any of their local rights and privileges.

The issue lay entirely between broad and narrow conceptions of the historical destiny of the Union. So far the narrow conceptions had prevailed. They had hampered the conduct of the war; they had kept the central government in a state of chronic bankruptcy; they had wasted four or five years over the original articles of confederation; and the articles, when at last a majority of the states had been induced to accept them, were found to be utterly inadequate to hold the states together. The Federalists, who saw this defect most clearly, and also the seeds of future disruption which it contained, were the real statesmen of their day. The others were by comparison mere politicians and log-rollers. It

so happened the statesmen had also courage and resolution equal to their discernment.

Never, indeed, had a small body of men such an opportunity of rendering paramount service to their country and to political progress. The Federalists of 1783-87, who condemned the articles of confederation as falling far short of national unity, have had their statesmanship proved by the highest and most conclusive of all tests—historical experience. The United States, after a century and a quarter of conflict and controversy, is steadily realising their ideal. It is becoming the strong, united, and well organised nation they dreamed of. It stands firm and square on the constitution which they drafted for it, and after years of struggle prevailed on the states to adopt. If they had done nothing more than establish that constitution, it would place them next to George Washington himself as benefactors of their country. But they did much more. They laid the foundations of an economic policy that still survives.

Here we have to do with the Federal statesmen of 1787 merely as financiers. They brought to bear on finance the same rare combination of qualities that enabled them to frame one of the best working constitutions now in existence, and to impose it almost by force on their countrymen at a time when its merits could be very imperfectly appreciated. They reduced to order and solvency a chaos of public debts. They organ-

ised a national treasury with all requisite accessories—a Control Department, an Audit Office, a Mint, &c. They placed the currency definitely on a metallic basis, and gradually redeemed the national credit from the scandals of the war period. They took stock of the resources of the country, and marked out the lines of development best suited to them. They broke down the tariff walls which the states were raising against each other, and replaced them by a national tariff which furnished a basis for commercial treaties with the principal states of Europe.

Men talk nowadays of constructive statesmanship, but if they wish to see it in actual operation they must go back to the first decade of Federal rule in the United States. Between April 1789, when Washington was inaugurated as first President, and 1800, when Jefferson won the first victory of the anti-Federalists, more great organic measures were passed in the United States Congress than ever got through any other legislature in a similar period. The effect of them was speedily seen in the rapid progress which the country began to make in all branches of industry. The worst finance that ever existed disappeared as if by magic, and was replaced by a system which was at least sound in principle, if not immaculate in practice. And can much more be said for a good many of the financial systems that hold a front place in the commercial world to-day? Over a century ago, when specie pay-

ments were suspended in England, they were just coming into vogue in America.

In the small band of America's first-born statesmen who framed her economic policy, one man, Alexander Hamilton, rose head and shoulders above all the others. Among the leaders of the revolution he stands in our opinion close to Washington himself—his adored chief and intimate friend. Between these two there was perhaps more affinity and sympathy than between any of their colleagues. They were men of a very similar type, though so different in origin. It was hardly to be expected that the Virginia planter, by blood and breeding an aristocrat, could have much in common with a youth born in one of the smallest of the West India islands (Nevis), and educated at a royal foundation school in New York. Nevertheless, they took to each other at their first meeting, and with one brief interruption continued to be fast friends to the end.

Hamilton's parentage was in its way as good as Washington's own. The son of a Scottish officer and a Huguenot lady, he represented one of the best types of manhood that the old world had yet produced. In him a strong and flexible intellect was combined with high character, refined sentiment, and untiring energy. During his public career he again and again undertook tasks that seemed hopeless, but he never let go until he had carried them through. The greatest

fight of his life—that for the Constitution—cost him three or four years of incessant labour, given without a grudge. He never desisted or despaired, however discouraging the outlook. And the foresight he exhibited has hardly a parallel in political history. But anything in that way was possible to one who, while a boy at college, could sway public opinion by closely reasoned and forcibly expressed pamphlets; who distinguished himself as an engineer officer before he was well out of his teens; and who, while still a youth, was Washington's confidential aid-de-camp and private secretary.

At the close of the war Hamilton launched into two careers, either of which might have taxed any ordinary man of his age. In 1782 he was elected to Congress, and a year later he joined the Bar of New York. His political career extended from 1787 to 1795, when he finally retired. Of these thirteen momentous years the first half was spent in his great struggle for the Constitution, and the second half at the newly organised Treasury. He was, in fact, the first Secretary of the Treasury, and as such was a member of Washington's two administrations. It was Madison who suggested, when the new Constitution was inaugurated in 1789, that the executive, instead of being left as hitherto to boards and committees who had wofully muddled it, should be divided into regular ministries. Jefferson became the first Secretary of State, and Randolph the first Attorney-General,

while Hamilton, as has been stated, undertook the most difficult department of all—finance.

From the beginning of the war to the end of it, and all through the half-dozen years of anarchy and confusion which followed, the cry that rose above all others was, "What is to be done with our heavy debt?" Morris, the ex-Superintendent of Finance, replied, "There is one man in the United States who can tell you, and that is Alexander Hamilton."

After his appointment Hamilton did not keep the country waiting long for an answer. In 1790, when he had been only a few months in office, he produced his funding scheme. It proposed to consolidate five different debts,—first, the foreign debt of about eleven millions sterling; second, the Loan Office obligations, which represented loans raised in the states through offices which had been opened for the purpose; third, the arrears of army pay and pension commutations; fourth, the debt of the "Five Great Departments," as they were called; and lastly, the "Continental" notes—in other words, the 240 to 260 million dollars of paper money that had been issued by the Continental Congress lately deceased.

American organisers of the present day ought to regard with filial respect and admiration this oldest and most brilliant achievement in their line of business. A seventy-million-dollar job may seem a mere flea-bite to them, but let them,

please, remember that in 1790 there were no underwriting syndicates, no market-making pools, and very few banks. Specie was so scarce that it required a special effort to raise a trifle of five hundred guineas for the Government in a sudden emergency. But apart from pooling and underwriting, all the other interesting features of a big financial deal were present. The speculative interest with which Hamilton's plan was awaited assumed many curious forms. Though cows were still pasturing in Wall Street or near it, a strong Wall Street spirit was already abroad among the people. In a sober Pilgrim Father fashion they "took chances" occasionally on coming events; and Hamilton's report, while in preparation, gave them speculative opportunities that were irresistible.

For months before it came out all the thirteen states were gambling upon it. They discounted every good or bad point there was likely to be in it. All the possible ways of settling questions of depreciation, arrears of interest, special liens, and other contingencies were anticipated beforehand. Would they be dealt with liberally or the reverse? Interest-bearing bonds, would they be converted at their face value, or at their latest market price, or at their actual cost to the holder? They might be paid in full—though few holders dared to expect such good fortune; or they might be scaled down on some arbitrary principle; or some might be treated favour-

ably and others unfavourably. But the universal opinion was that in any event they might all be a purchase. A tremendous demand sprang up for them accordingly, and thus arose the first great American boom.

The germs of various other Wall Street mysteries are to be detected in Hamilton's funding scheme. It may be readily believed that he did not get it through Congress without difficulty. It called for some clever log-rolling, and even in the Cabinet it had to be made the subject of a "dicker" with Jefferson, Hamilton's lifelong rival. This deal had a sequel which renders it one of the most notable events in American history. Hamilton, wishing to make a clean start, proposed that the Federal Government should take over the debts of the states and fund them along with its own. But the Southern States objected, on the very reasonable ground that the Northern States would benefit disproportionately by this arrangement, as their debts were much larger than those of the South.

Hamilton found a way out of this difficulty. Jefferson and the other Southern members of Congress had set their hearts on securing the as yet unselected site of the national capital. They were determined that it should not be in the North, though Congress was then actually sitting at New York and was to sit next year at Philadelphia. They proposed to cut a corner out of Virginia and Maryland on the Potomac

River, and have Congress located there in a territory of its own. By swopping votes with them Hamilton carried his scheme. Eventually the Southern States turned in about as much debt taken over as the Northern States did. The respective amounts were about nine million dollars each, and the total was $18,271,786. The South had, therefore, much the best of the "dicker" over the Capitol.

Hamilton showed sound judgment in dealing literally with the whole of the debt. He was probably the only man at that time capable of rising above the huckstering skinflint spirit in which the public creditors had hitherto been treated. He knew that it would pay in the end to put the bond-holders in good-humour, and to keep on friendly terms with them. Very few years had passed before his policy was signally justified. Half a century later the Pennsylvania and other state governments, which for a comparative trifle allowed themselves to be branded as repudiators, would never have committed such a financial folly if they had had an Alexander Hamilton among them. The combined amount of the Federal and the state debts funded in 1790 was very nearly as great as the aggregate state debts of the repudiation period. Relatively to the resources of the debtor they were fifty times as great, but Hamilton persuaded the Congress of 1790 to shoulder them manfully. His victory over the motley crowd of repudiators,

"bond-clippers," and "soft-money" men was the crowning achievement of his life.

The funded bonds of 1790 became, as Hamilton anticipated, not only sound domestic securities but international securities also. When they first crossed the Atlantic cannot be accurately determined, but in 1811 we find them officially quoted on the London Stock Exchange. Two different issues are named—Old Six per Cents and Three per Cents. It is interesting to be able to identify them both in Hamilton's funding scheme. The original debts, with arrears of interest, were as follows:—

UNITED STATES DEBT FUNDED IN 1780.

Foreign loans and accrued interest .	$11,710,000
Domestic loans	27,383,000
Accrued interest	13,030,000
Floating debt	2,000,000
State debts assumed	18,272,000
	$72,395,000

For the principal of the foreign and domestic loans Hamilton proposed to offer two certificates,—one for two-thirds of the amount, to carry interest at 6 per cent from date of issue, and one for the remaining third, not to carry interest till 1800. The arrears of interest on both debts were to be funded in Three per Cents. The basis of conversion for the state debts was—one certificate for four-ninths of the subscribed sum,

bearing interest at 6 per cent from date of issue; one for two-ninths, at 6 per cent from 1800; and one for three-ninths, to bear interest at 3 per cent. All this seems complicated at first glance, and that judgment has often been passed on it since. But we have lived to see much more intricate schemes hailed as the perfection of multi-millionaire genius. Hamilton's device of deferred interest certificates has been frequently adopted by later financiers. The State of Virginia has such a bond running now.

It is amusing to find in this pioneer funding scheme some ideas which are to-day counted among the latest improvements in high finance. Hamilton invested his new bonds with all the guarantees and special liens he could think of. Not only were the national revenues pledged for both interest and capital, but a supplementary charge was given on the proceeds of all land sales in the Western territory. The foreign debt was even further favoured by having a prior lien given to it.

As a financial operation the funding loan of 1790 was one of the most successful in the long history of American finance. For a parallel to it we have to come down to the funding loan of 1870, three-quarters of a century later. From the moment that it was thrown open to the public it went through without a hitch. Within a year nearly 32 million dollars of new bonds had been subscribed, and by 1794 another 32 million

dollars had gone through. The only difficulty was to hunt up old certificates in order to send them in for conversion. Collectors scoured the remote settlements with waggon-loads of specie in order to buy them up. A Congressman who kept a diary notes in it, under date 15th January 1790, that he cannot call at a single house but traces of speculation in certificates appear. One of his associates, Hawkins of North Carolina, had told him that on his way to the capital he passed two expresses with very large sums of money on their way to North Carolina for the purpose of buying up certificates.

The exciting game of high finance will always be liable to fits of over-zeal even in the most civilised communities. The rush for a Japanese or a Russian loan in 1906 is the same kind of psychological fantasia that certificate-hunting was in North Carolina in 1790. The Americans may be none the less proud of having produced in the tenth year of the Republic such a skilful piece of high finance as Hamilton's funding plan. It will bear comparison with the latest manipulation of the multi-millionaires.

BOOK I.—ITS EVOLUTION.

CHAPTER III.

ITS GROUNDWORK.

THE groundwork of all national finance, and indeed of civilised commerce, is legal money. Legal money presupposes the existence of a government qualified to create it. Organised government cannot be carried on without the help of a fiscal system and a treasury. In the same way private business requires for its proper development an organisation of banks and other monetary agencies. From these two sources arise public and private finance respectively. Each of them derives from its origin and early history the most essential part of its character. The groundwork of a financial system is therefore to be looked for in three fundamental conditions which will generally be found to have determined its character. The first is the currency of the country; the second, its fiscal machinery; and the third, its banks. At a later stage the stock exchange with its many ramifications comes into play, but its influence may be best studied separately.

American money as a factor in the development of American finance has undergone so many erratic changes that in order to appreciate them thoroughly we have to trace them back to the infancy of the republic. Some writers go even farther back, and find in the monetary troubles of the colonial era the germs of various peculiarities in the American currency of the nineteenth century. Dewey, in his 'Financial History of the United States,' frankly admits that "it has its roots in the methods, experiences, and political philosophy of the thirteen colonies." The description he gives of these might be applied with almost equal truth to later periods of American history. It shows both the monetary and the fiscal systems of the country gradually shaping themselves out of chaos.

The colonies [says Dewey] were established at different times and under different impulses, and it is consequently natural that they should have tried a variety of revenue measures, for the most part crude and yet on the whole not badly adapted to new and raw conditions of material life. Rarely, except in time of war, were the demands upon the colonial treasuries burdensome or excessive, and the adjustment of revenue to expenditure or of expenditure to revenue was easily made. Most of the colonies fell into the error of too abundant issues of paper money,—at first to meet special strains, and later, in many instances, to discharge ordinary obligations which should have been met by taxation. But this error was fostered by the argument that the community needed a greater supply of money both as loanable capital and as a medium of exchange,—an argument

entirely distinct from budgetary requirements. With the revolt against England in the latter part of the eighteenth century there arose the necessity of some national system of finance to meet expenditures undertaken in a common cause, particularly in the support of the army. A national system had to be created not only out of the varied and crude financial experiences of the thirteen colonies, but also in a time of political confusion, when there was little time for inquiry, deliberation, and careful maturing of plans. Financial disaster was the result.

Professor Dewey's view of the financial condition of the thirteen colonies, and of the powerful influence it exercised on the financial development of the Republic, is exactly what might have been looked for from a discerning, impartial economist. Its interest is, moreover, much enhanced by its being the calm judgment of an American writer, formed at a distance of nearly a century and a half from the events themselves as well as from the bitter jealousies they excited. Only one element in the case he has overlooked, and that is the share of the colonial banks in producing the financial troubles of the period. It was very considerable, and as such it cannot be ignored in any analysis of the determining causes which have made American finance what it is to-day.

Our three special factors in the making of financial history — currency, fiscal policy, and banking—were all in vigorous action during the colonial period. They were also in close contact with each other,—much closer than they have

usually been in European countries. Sometimes they worked together, but quite as often they worked against each other. At this distance of time the details of their rivalries and controversies have ceased to be important, but their activity and their close association are two cardinal facts to be kept continually before us. They will always keep themselves before us in the later history of American finance. They run through it from the birth of the Continental Congress down to the latest movement in favour of currency and banking reform. On all great questions of finance, the treasury, the currency, and the banks seem to be bound together in the grip of a Laocoön. One cannot move without disturbing both the others. In every financial crisis the treasury, the currency, and the banks appear together either as friends or rivals.

In the very dawn of American history we find confirmation of the maxim that the currency of a country is one of the readiest keys to its finance. It was not only the key but the mainspring of New England finance during the colonial period. And in each succeeding period we find the essential connection between the two growing more and more active. The history of the one is the history of the other, looked at from a different point of view. In their development they overlap and get interwoven with each other, sometimes too closely. If the monetary system of a nation be simple, stable, and self-consistent, not

only its finance but its commerce and its general industry have a fair chance to be the same. On the other hand, where it is erratic, unstable, and unreliable, they can hardly escape from its unsettling effects.

Money as a rule derives its character primarily from the work it has to do, but with that may be associated a number of secondary influences. Politics may be a powerful agent in the process, and nowhere has this been better illustrated than in the United States. Physical and territorial conditions may also have a marked effect. A scattered community such as the Americans were in the infancy of the Republic requires a larger average per head of circulating medium than one more condensed. Then, again, the form of government may have much to do with the volume of currency required in a given case. It is invariably smaller in proportion to population and extent of trade under a constitutional monarchy than under a republic.

Modern sovereigns have learned from the experience of their predecessors that it is wise to leave the currency severely alone. If they were tempted to meddle with it, the other estates of the realm would in most cases be strong enough to prevent them. But in a republic, where the people are their own masters, they can experiment at will on the various parts of the political machinery. They may pick the tariff to pieces one day and change the monetary standard the

next. The republics of the present day have almost without exception supplied themselves lavishly with both metallic and paper money. To say that American currency is on a republican scale is to indicate that it is superabundant. Granted that the work it has to do is also far above the average, still it appears to be greatly in excess of actual requirements. Moreover, the excess is continually growing.

The effects of a lavish currency on the commerce and finance of a nation must of course differ widely from those of a stinted currency. We are not considering at present which is the better condition of the two. All that concerns us here is their relative results. It is perfectly natural that a plethora of money should stimulate trade and encourage financial enterprise more than a bare sufficiency would do. It is no less natural that an active enterprising people should be more anxious to maintain an ample supply of money than a sleepy conservative people might be. The two conditions generally occur together. A copious currency and exceptional enterprise often coincide. They certainly do in the United States.

Among the determining conditions of American finance the first place must be given to chronic excess of currency. Its unfortunate tendency is to drive capital into artificial channels, and to encourage accumulations of it where it can be least profitably employed. Nor is there any

definite limit to such accumulations. So long as new national banks can be organised, the volume of national bank-notes can be steadily increased. Every time the people ask for more silver dollars the Treasury must supply them. When they send in gold it must give them in exchange gold certificates of full mint value. All these operations may be carried on indefinitely, and while they continue there will be no limit to the flood of money let loose: nor will there be a conceivable limit to its superabundance and consequent cheapness. Given a fair prospect of cheap money for a year or two ahead, there are few other risks that speculators will not cheerfully face. Nothing will be too gigantic for them to undertake. The financing of billion-dollar trusts becomes an ordinary incident in their feverish lives.

So much for currency as a moulding and controlling influence on American finance. The next in order to be examined is the fiscal system. No one will venture to suggest that the fiscal authorities in the United States, among whom must be included the Executive, both houses of Congress, the Treasury, and the State Legislatures, have not all done their full share in producing the present financial situation. Politicians of all sorts and shades have contributed their mite to the wonderful complication. War as well as peace has had a voice in it. No less than three times has the financial power of the Union been strained to the utmost by military expenditure for which

it was utterly unprepared. It fought for independence literally with empty pockets. Its first war bills were paid with 250 million dollars of paper money, which, when it had done its work, disappeared. Hardly a single specimen of it now exists, even in museums.

Its second war, that of 1812, had also to be fought chiefly with paper money. As in 1775, the Treasury was empty, gold and silver were seldom seen, and public credit was at zero. The Government had many clamorous creditors, and very little revenue coming in to pay them with. There were few capitalists with spare cash to invest in the Six per cent Bonds, which were offered in vain at the Treasury. The Government were at last driven to the desperate expedient of reviving an old colonial form of borrowing. In 1812 Secretary Gallatin proposed to issue Treasury notes, partly to eke out the bond subscription, and partly to give the public a choice of securities. They were to run for one year, to carry interest at the rate of a cent and a half per day for every hundred dollars, "to be receivable in payment of all duties, taxes, or debts due to the United States," and to be convertible into Six per cent Bonds.

The reader should take special note of this remarkable document, both for its own sake and for the important part it played in the subsequent history of the United States. It is interesting and significant on many grounds — first, as a

reversion to the colonial finance described by Professor Dewey; second, as an example of the emergency devices to which the United States Government had so often to resort in its early difficulties; third, as a direct intervention of the state in the business affairs of the country; fourth, as an illustration of the close connection which existed then, and has existed ever since, between the fiscal policy of the United States and its currency and banking; fifth, as a prototype of the crude finance which reappeared fifty years later at the outset of the Civil War.

It is a strange historical coincidence that in 1861 Mr Lincoln's Cabinet underwent exactly the same experience as their predecessors had done in 1812. They found in the Treasury hardly enough money to pay the salaries of the members of Congress. Small loans had recently been raised at 12 per cent for current expenses. Specie had almost disappeared from circulation, and the small amount of it left was jealously guarded by the banks. It also speaks badly for the financial ingenuity of the Lincoln Cabinet, that they could not think of any better methods of borrowing than the desperate devices of 1812. Several of these, more particularly the Treasury note above described, were closely copied by Secretary Chase in his earliest loan operations.

The loan operations of 1812 and 1861 will be more minutely described and compared in a later

chapter.[1] They are referred to here only to show what an important factor the fiscal policy of the United States has been in its finance, both public and private. They also indicate how closely interwoven it has been with the other cardinal factors in the case—namely, currency and banking. Nowhere have public and private finance acted and reacted on each other so powerfully as in American history. Nowhere do they stand so close together, or so frequently come into collision. But it is not all jarring between them, for there are memorable instances of their having helped each other. If, on the one hand, political exigencies called for the creation of an independent Treasury, on the other hand the independent Treasury has had its effect on politics. Both in turn have had a distinct influence on finance.

The mere fact of Government initiative having been so strong in financial affairs distinguishes the United States widely from European states. In England we find such initiative at a minimum. Our Parliament shirks the simplest of fiscal or financial problems which the United States Congress would revel in. The French Government has rather more financial courage than ours, and the German has a little more than the French, but for a bold business-like course commend us always to President Roosevelt. Powerful as personal initiative may be in finance, public initiative like his is a far stronger factor. In all great

[1] See chap. xi., "Its Banking Treasury."

financial movements the American Executive will be found taking an active as well as an influential part. Congress, the Treasury, the State Legislatures, and political bosses have shared with bankers and other practical men the responsibility of financing the Republic. How great a responsibility it was few of them realised at the time, but they were always ready to learn, and experience was never thrown away on them.

Of course many mistakes and also a few scandals resulted from a too promiscuous mixing up of politics and finance. Well-deserved reproaches may be launched at the stump politicians and wild-cat financiers who, in their haste to develop the vast resources of the Republic, plunged a large part of it into bankruptcy and repudiation. That was undoubtedly a trying episode, and while the evil memory of it lasted it was a strong argument against fiscal influence in finance. Now, however, the pendulum seems to be swinging back toward the opposite extreme, and fiscal control is at a premium.

The third and last of the special factors which have laid the groundwork of American finance is banking. The banks of the United States have had such a chequered history that their relations, with the Government on one hand and with the public on the other, have of necessity varied greatly. At one time friendly, at another hostile and sometimes neutral, they have always been an

uncertain influence. The latent jealousy which still prevails between the Treasury and the banks, breaking out now and then into active friction, is a faint survival of ancient feuds which in their day were both acute and bitter.

Even in the days of colonial legislation bank charters were the most fiercely contested of political issues. The General Councils of Massachusetts and Pennsylvania were more divided over them than on any other public question. The colonial governments competed with societies and private individuals in the banking business. Loan banks, land banks, and silver banks tried their fortunes one after the other, but generally with poor results. Very few of them survived at the close of the colonial *régime*, and they left so indifferent a reputation behind them that neither the Continental Congress nor the Federal Congress which succeeded it showed any great partiality toward banks. They were a vexed question among the framers of the constitution. They gave rise to violent debates during the organisation of the public service in the critical years, 1789-91.

During the first two decades of the Republic, the bank and anti-bank factions in Congress were more virulent toward each other than the Whigs and Tories. After a quarter of a century of comparative peace the feud broke out again in President Jackson's administration, and a

"bank war" raged for several years. Banking discussions are conducted with so much dignity and propriety nowadays, that it is almost impossible for us to conceive of such a subject having provoked Homeric contests all over the country. Orators like Daniel Webster and Calhoun thundered against each other over it in Congress. Every state legislature was divided against itself upon it. Chambers of commerce discussed it again and again without being able to reach an agreement. It introduced discord into churches and chapels. It caused strife in families, and broke up public meetings in disorder. It was the main issue of many elections, and at least one presidential campaign was decided by it. In 1832 anti-banking was as fierce a war-cry as anti-slavery became in 1860.

After President Jackson's Pyrrhic victory over the Bank of the United States in 1833, the Treasury and the banks assumed an attitude of armed neutrality toward each other. This lasted till the outbreak of the Civil War, when in the most public-spirited manner the associated banks of New York, Boston, and Philadelphia volunteered their united assistance to the Treasury for raising war loans. It would have been well if Mr Chase had made fuller use of the help they volunteered, especially if he had given their financial proposals a more complete trial. As the war proceeded, and his financial difficulties

increased, he had to accept more of their assistance and advice. In the end a compromise was arranged, out of which arose a new order of national banks. These, though not of much account to begin with, have multiplied and strengthened till they now justify their title. They have become a prominent and, so far, indispensable link in the financial system of the United States. They stand between the Executive on one hand and the public on the other, not only serving both, but exercising no small influence over them on economic and financial questions.

The banks of the United States, whether friendly, hostile, or neutral in their relations with the Government, have had a large share in every successive stage of the evolution of American finance. They had never more influence on it than at the present time, nor was there ever greater need to consider seriously how that influence is exercised. Strange to say, public opinion is still almost as much divided on banking questions as it was half a century ago. The differences may be of another kind,—instead of being mainly legal and political, they may be more technical, but they are no less important. It is also true that they are discussed in a very different spirit to that of President Jackson's day. Political passions have died out, and popular prejudices have been allayed. Other complica-

tions, however, survive, and it is still difficult to get at the real issue in any banking discussion.

Here we may conclude our general review of the three fundamental forces in American finance, —currency, fiscal policy, and banking. Detailed criticism of them may be left to a later stage, but meanwhile they have to be considered from another point of view. Hitherto we have studied them separately,—a condition in which they are never to be found in real life. They have still to be seen in combination, which is their practical form. Currency, fiscal policy, and banking are always more or less mixed up together, and their combined, not their separate effects, are what determines the character of national finance.

When we add up the three fundamental forces we obtain an aggregate financial power that would be overwhelming if it were all perfectly sound and genuine. On the 30th June 1905, the money in circulation in the United States was officially reported at 2588 million dollars. The net cash balance in the Treasury—setting aside gold and silver held against outstanding certificates—was 295 million dollars, making 2883 million dollars of currency, paper and metallic. On the same date the "banking power" of the United States was officially estimated on the basis of returns obtained from national, state, private, and savings banks, trust and loan companies, and all other institutions having any claim to be recognised

as banks, at the enormous total of 16,918 million dollars, or 3384 millions sterling. Thus we have as the basis of American finance—

Money in circulation	$2,588,000,000
Net cash balance in Treasury . . .	295,000,000
Banking resources	16,918,000,000
Grand total .	$19,801,000,000

Equal to three thousand nine hundred and sixty millions sterling.

Europe can furnish no standard of comparison with stupendous totals like these. They not only eclipse every individual state in the old world, Great Britain included, but the whole of these states together are not much ahead of them. The growth of banking power is also much faster in the United States than anywhere else. On this point the Comptroller of the Currency says—

From the latest and most reliable data, the banking power of foreign countries has been estimated at $19,781,000,000, thus making the aggregate banking power of the world approximately $33,608,000,000. The world's banking power in 1890, as estimated by Mr Mulhall, was $15,985,000,000, the United States being credited by him with something less than one-third of that amount. The present estimate, compared with Mulhall's, shows that the banking power of the United States has been increased since that date by $8676,000,000, or 168·47 per cent, and that of foreign countries by $8946,000,000, or 82·57 per cent, the

combined banking power of the world having increased since 1890 from $15,985,000,000 to $33,608,000,000, a total ratio of increase of 110·25 per cent.

In cash resources the United States Treasury is quite as unique as the banks. No Government in Europe is in the happy position of carrying a net cash balance of nearly sixty millions sterling. The British Chancellor of the Exchequer is pleased when his bank balances can be kept at five or six millions, and then he has to shut his eyes to a floating debt of over seventy millions sterling, which, if taken into account, would leave him with a thumping deficit.

But it is in currency that the United States leaves all competitors out of sight. All the gold, silver, and bank-notes circulating in the United Kingdom would be a mere grain added to the American heap. The latest Mint estimate of gold in circulation in the United Kingdom is 63½ millions sterling, to which 36½ millions may be added for gold in bank reserves. A liberal estimate for our whole stock of gold will be a round 100 millions sterling. The stock of silver is generally supposed to be about 20 millions, and the average weekly circulation of bank-notes seldom greatly exceeds 40 millions. But of that modest amount, fully one-fourth is covered by gold held against it in the issuing banks. The "fixed" or uncovered issues are less than 30 millions sterling. The grand total of gold, silver, and uncovered paper is thus about 150 millions

sterling as against the American 2883 million dollars, or 576 millions sterling! Excluding the net cash balance in the Treasury, the active circulation in the United States still exceeds 500 millions sterling.

As regards banking power, only approximate comparisons can be drawn between the United Kingdom and the United States. There are many banking institutions in the States—trust companies, for example, which have no counterpart in this country. On the other hand, our banking resources are not like the American, chiefly domestic. They are cosmopolitan, domestic funds being largely supplemented from abroad. Moreover, our banking statistics are very meagre and incomplete beside the official returns collected from all quarters by the American Comptroller of the Currency. The only item we can have much faith in is the resources of the joint stock and private banks of the United Kingdoms, which publish periodical reports. In round numbers they may be taken at 900 millions sterling, a flea-bite compared with the 16,918 million dollars, or 3384 millions sterling of the American banks, trust companies, &c.

For the present we give these gigantic figures without prejudice, and without comment. Criticism must be reserved for subsequent chapters, in which they can be carefully analysed and examined. The special object of marshalling them here is to present the reader with a bird's-

eye view of the immense financial power that lies behind them. But not unqualified and unconditional power. On the contrary, it is power with many qualifications, defects, drawbacks, and dangers. If the currency were as efficient as it is abundant, if the banks were as well managed as they are numerous, and if the Treasury were as perfect in its methods as it is strong in resources, the millennium of American finance might be very near at hand. But if the Americans are still mere human beings, subject to human errors and human weaknesses, there may be quite as much to fear as to hope from this tremendous accumulation of financial power. While all goes well with it, its progress will continue to excite the envy of the world, but when a big screw gets loose in a machine of that sort, the smash will also be of world-wide interest.

BOOK I.—ITS EVOLUTION.

CHAPTER IV.

ITS "WILD-CAT" DAYS.

A FINANCIAL system starting from such a maze of discordant and conflicting ideas as surrounded the birth of the Republic could not fail to have an erratic growth. Anything else would in fact have been impossible for it. From the Declaration of Independence down to the present day, the United States has been in a condition of financial flux. It has passed through so many phases of financial faith, ranging from the severest orthodoxy to the most cynical Bryanism, that even native critics struggle in vain to keep track of them. It has plunged into so many fiscal, monetary, and banking experiments that there are few left for it to try.

For this wild and stormy period of their financial history the Americans themselves have furnished some very appropriate descriptive titles. They speak of it as their "wild-cat" days, their "log-house" stage, their "cross-road banking" time. The most picturesque of all these nick-

names is the wild cat. It fits the whole round of financial gaucheries, which began with the "Continental Congress" in 1775, and ended, let us hope, with the repudiation scandals of 1839.

They underwent many historical changes and modifications incidental to the growth of the country. First, there was the reign of the Continental Congress, now remembered less for its heroic struggles in the field than for the avalanche of paper money that overwhelmed it; next, the comparatively calm interval between the Constitutional Convention of 1789 and the war of 1812; next, the growing time from 1812 to the Jackson administration which opened in 1829; lastly, the Jackson *régime* itself, which proved so disastrous to trade, banking, and all other financial interests of the Union. The interval between 1839 and 1861, when the greenback *régime* commenced, was a transition period without any very distinctive character.

The "wild-cat" days of American finance had, as will be shown in due course, a number of national peculiarities. They had also some curious political ramifications. In most of them politics was a ruling and in many cases a dominant factor. More of the financial troubles of those days proceeded from Washington than from any other quarter. Congress and the state legislatures had the fortunes of the people in their hands. By their tariff, their currency, and their banking legislation they could create arti-

ficial prosperity or destroy it. No doubt they committed many errors and attempted some impossibilities, but on one point they were always consistent—their craze for cheap money.

There are perversely constituted countries which can have at the same time a glut of money and a famine. The Americans had that double experience for several years after the collapse of their "Continental" currency. The faster it depreciated the greater need there was for some new money to fill its place. The people had to find or manufacture substitutes for themselves. A veritable chaos of currencies was the result, glimpses of which often give quite an exciting interest to an otherwise dry subject. Here is a short one taken from a curious book, 'The History of the First National Bank of Chicago':—

The Continental Congress was baffled by the same problem: 242 million dollars of paper was issued in 1779; in 1781 it was worthless. Various remedies were suggested and tried without avail. The success of the revolution itself was jeopardised, for salaries could not be paid, and soldiers were in open mutiny. After the close of hostilities relief was very slowly accorded, and for many years confusion prevailed. Some gold, more silver, and much paper thenceforth constituted the circulating medium of the new republic. "Continental" bills, pieces of eight, Spanish dollars, provincial shillings of various values, British sixpences, French napoleons, Dutch florins, and German thalers, together with a miscellaneous assortment of "shinplasters," "wild-cat" issues, "stump tails," and greenbacks, were in active circulation or succeeded each

other. Every merchant was obliged to keep at hand a printed table showing the current value of each of these beautiful representatives of the precious metals.

During the colonial period and in the early years of the Republic the Government issues of paper money were large enough to have left little room for any rival purveyor; nevertheless competing issues were frequently attempted by trading associations, and even by private individuals. In fact, the mutual jealousy which still obtains between the United States Treasury and the banks may be said to have had its origin in their century-old competition in the paper money manufacturing business. Very soon the politicians and the financiers of the revolution made paper money a political issue. It is not only one of the oldest but one of the most persistent issues in American politics. It has undergone the most Protean changes, and the form it presents to-day could not be recognised by those who fought over it fifty years ago, but in spirit it remains the same. The Treasury and the banks are always painfully conscious of each other's anomalies and defects.

But scant encouragement as they received from the state, the banks persevered in the "wild-cat" money business until they got only too large a share of it. In their original form they were more land banks than commercial. Repeated attempts were made in the New England colonies, and especially in Massachusetts, to acclimatise the

latest banking hobbies of the old world. In 1701, and again in 1714, a land mortgage bank was projected on Argentine lines. Every man's land was to be valued, and for the full valuation he was to have credit-bills issued to him bearing 5 per cent interest. These he was to pay out for his current expenditure, and the ingenuous idea of the projectors was that once out they would remain in circulation indefinitely. On this sunken rock such paper money schemes have always come to grief.

But the Provincial Council of Massachusetts was not yet ripe for ideal money. It threw out the scheme of 1701 and again that of 1714. The agitation, however, still went on, and in 1732 an epidemic of land mortgage banks commenced. One was started then in New London (Connecticut), and in 1739 Massachusetts made a third trial. This time the General Court was favourable, but the Governor, acting perhaps under special instructions from home, was obdurate. The conflict between the legislature and the executive which ensued was a thoroughly characteristic episode of American monetary politics. Boston would have its own way with bank-notes as well as with tea, and in the end had to pay dearly for it. The land bank-notes were poured out in such floods that in less than ten years they were worth only nine cents on the dollar. In 1748 £1100 of them could be bought for £100 in coin.

These land bank-notes helped materially to provoke the severe measures taken by the Home Government in 1751, when the colonies were positively forbidden to issue legal tender money of any kind. Indirectly, therefore, it had no small influence on the serious events which followed. It may seem late in the day to be discovering new causes for the revolt of the colonies, but this one is now frankly recognised by the Americans themselves. The book already quoted says that the imperial veto on legal tender issues "aroused the deepest ire on the part of the colonists, and it may truthfully be said that their devotion to this cause [paper money] was a potent factor in the movement toward revolution."[1]

The founders of the Republic were well aware of the weak points of the colonial *régime*. Of these the two weakest were ignorant impatience of taxation and an incurable partiality for rag-money. Both these foibles spring from the same root. It was because the colonists would not pay taxes that the Government had to pay its expenses with paper. The leaders of the revolution were more afraid of paper money than of anything else. They were specially afraid of the state governments falling into their old colonial habits of free issue. As a safeguard against that, which has fortunately proved successful, they inserted a prohibitory clause in the Articles of Confederation, and renewed it word for word in the

[1] History of the first National Bank of Chicago, p. 11.

Federal Constitution. It expressly forbids any state "to emit bills of credit, pass any law violating the obligation of contracts, or make anything but gold and silver a legal tender in the payment of debts."

This shut out one formidable competitor in the paper money line,—the one that there was most reason to fear, inasmuch as the mischief it might have done was incalculable. Congress has had trouble enough to keep two sets of "bills of credit"—those of the Treasury and the banks—under control. If every state government had been free to add to the deluge, cedulas would have been a trifle to it. Most of the bad things in this world might have been worse, even "wild-cat" money. Through the constitutional veto on state issues, the Treasury and the banks secured the currency business to themselves. In the discharge of that important public trust both of them have committed serious errors. They have also at times indulged in strange vagaries and excesses. But after all let us be philosophic and admit that they might have gone farther. One redeeming point should certainly be put to their credit,—they were seldom bad at the same time, but took turns at it.

During the first seventy years of the Republic the banks had almost a monopoly of the "soft money" trade. That they should abuse it was a practically inevitable result of the absurd conditions under which they had to be operated.

Every bank from the highest to the lowest had to be a political institution. The smallest of them was always more or less liable to the same fate that twice swept away the Bank of the United States. The worse banks they were from a business point of view the better they suited the politicians, and the more disastrous would be their collapse when they did go. They required, as a rule, very slight excuse for going. No possible degree of prosperity could keep them all solvent, but a comparatively slight commercial crisis shook them down like over-ripe fruit. Banks were consequently always unpopular in the Western states, and a remnant of the old prejudice against them lingers there still. As for bank-notes, they were tabooed and legislated against in the most vigorous terms. The original constitution of Ohio contained a provision for organising corporations, "except those with banking privileges, the creation of which is prohibited." By another clause any exercise of "the privileges of banking or creating paper to circulate as money" was forbidden, under the penalty of one year in the county jail and $1000 fine.

These violent antipathies had a double origin—political and commercial. They would have been sufficiently justified by the scandalous history of the banks themselves; but that might have died down had it been left alone. What the banks could not get over was the misfortune of having

been made, almost from the foundation of the Republic, the stalking-horse of party politics. Money was one of the most burning questions of the day in the old world as well as in the new. The first Congress of the United States swarmed with currency faddists who out-Heroded the extreme views they had learned from their various oracles in Europe. Strange as it may sound in 1906, the Democrats were the original champions of sound money. Their idol, President Jefferson, was an uncompromising opponent both of paper money and of banks—two institutions which in those days were deemed inseparable.

In the first Federal Congress banking and currency excited the most vehement debates and gave the keenest edge to party strife. They were elevated into a great constitutional issue by the Jefferson Democrats, who, oddly enough, first took the name of Republicans in order to distinguish themselves from the Federalists. They were rabid State Rights men, and pushed that view to what may now seem absurd lengths. The clause in the constitution forbidding the states to "emit bills of credit or make anything but gold and silver legal tender in payment of debts" they would have extended to the Federal Government itself. "No banks and no paper money" was their cry. Jefferson's personal opposition to both is said to have been of "the most determined character." He denounced banks "as parasitical institutions, and he seldom

let slip an opportunity of expressing his abhorrence of their whole system of operations." The Bank of the United States was his special *bête noire*, and in opposing its first charter he asserted some very high-flown political doctrines:—

> I consider [he said] the foundation of the constitution to be laid on this ground, that all powers not delegated to the United States by the constitution nor prohibited by it to the states are reserved to the states or the people. To take a single step beyond the boundaries thus specially drawn around the power of Congress is to take possession of a boundless field of power no longer susceptible of definition. The incorporation of a bank and other powers assumed by this bill have not, in my opinion, been delegated to the United States by the constitution.

There we have one of the earliest appearances of the doctrine of state rights which eighty years later came very near breaking up the Union. It would have been impossible for any financial institution to make headway against such a combination of political prejudice and personal hostility as both Banks of the United States encountered. In 1811, when the question of renewing the original charter came before Congress, it was negatived in the House of Representatives by a majority of one, and in the Senate by the casting vote of the vice-president. The people themselves appear to have been about as equally divided as their representatives in Congress. This greatly aggravated the difficulty and de-

layed its subsequent solution. It also furnishes a key to the confusion of opinion on currency and banking questions which has survived among the Americans almost down to our own time.

Echoes of colonial and "Continental" monetary heresies are sometimes to be heard even in these days. They were rampant in 1811, and when the Americans plunged into their second war with the old country in 1812, their financial condition was almost as desperate as it had been at the most critical period of the revolution. When the first Bank of the United States was killed by Congress there were about a hundred small local banks in existence. Their capital ranged from $50,000 up to $3,000,000, and nearly all of them issued notes. In the Eastern states they had to supply the greater part of the currency, as there was very little coin even for small change. Twenty-five cent notes were common in Philadelphia. They were even considered a great advance on the currency conditions of a few years before. In 1790 the Bank of North America—the first bank with a Federal charter—had issued penny notes, specimens of which are now jealously preserved in the cabinets of curio collectors.

In those days note issuers did not stand on their dignity—not even in New England. Notes were produced of all sizes to suit every class of customers. In aristocratic states like Pennsylvania, Maryland, and Virginia, the line was

drawn at five dollars, but in democratic New York and Massachusetts the minimum was one dollar. Which was the most advantageous minimum for banking purposes became afterwards a very fervid question among the banks themselves. New banks often tried to cut into the business of older ones by splitting notes. When the second Bank of the United States was launched it adopted a ten-dollar minimum, as being most consistent with its national prestige. But the effect on its issues was disappointing. Its offers of easy discounts were readily accepted, and they soon ran up to over forty million dollars. With a proportionate amount of circulation it might have done well, but it could not keep more than ten million dollars of its notes out. This gave the state and private banks such an advantage over it, that in 1827 it pocketed its dignity and began to issue five-dollar notes.

We have said that during the first seventy years of the Republic the banks had a virtual monopoly of the "soft money" trade. The converse is equally true that during these seventy years "soft money" had a monopoly of American banking. With very rare exceptions the banks lived on their note issues. They could not live on their capital because it was never large enough to keep them, even if it had been genuine instead of being fictitious, as the bulk of it generally was. If the stockholders paid the first call in hard cash or negotiable securities and gave their promis-

sory notes for the rest, that was considered ultra conservative banking. Very often favoured subscribers were allowed to put in promissory notes for the whole of their stock. In the best case the note issues formed the bulk of the working capital, and in the worst they were liabilities without assets. When a bank failed it was invariably the note-holders who lost most, as the subscribers had taken care not to risk much beyond their "I.O.U.'s."

Judged by European standards these "wild-cat" banks were absurdly small, but small as they were they did an infinite amount of mischief. From 1812 down to the middle of the century they left a long trail of wreck and ruin behind them. At short intervals banking booms and banking panics succeeded each other. In 1811 there were 59 chartered banks with an aggregate capital of 52½ million dollars. In the following three or four years 120 new banks were organised with an aggregate capital of 40 millions. The crisis of 1814 made an almost clean sweep of them, and of the older banks as well. While the original 59 had an average capital of nearly $900,000 the new ones averaged only one-third as much, or $350,000. It was not stock the promoters were after but note issues. The amount of their issues was always the best index to their business, and the violent fluctuations it underwent betrayed its speculative character.

According to one account, the bank-note circu-

lation rose from 52½ million dollars in 1811 to 62 millions in 1813 and to 110 millions in 1815, from which it relapsed to 45 millions in 1819. Gallatin's estimates are considerably lower than these, his maximum (1816) being only 68 million dollars. But even his figures indicate an abnormal supply of currency for such a community as the United States then was. The population all told was only 7½ millions, and the exports were valued at about 65 million dollars a-year. At the outbreak of the war of 1812 the Government had an available revenue of barely 12 million dollars a-year, and its peace establishment could not be reduced below 8 millions. It had consequently only 4 million dollars a-year of normal revenue to carry on the war with, and most of that was in "soft money," standing at a discount of from 10 to 15 per cent.

In 1812 the United States Government had an awkward financial dilemma to face as well as a military one. Of the two the financial dilemma gave it the greater trouble, and left worse effects behind it. Extraordinary resources of some kind had to be found. The people were no more disposed to shoulder a load of war-taxes than their fathers had been in the War of Independence. They would fight, but they would not be taxed. Unlike their fathers, they would not give the Government a free hand to issue paper money. The general belief was that anything in the nature of greenbacks would be simply refused.

The banks—a new factor in the case since 1775—held the field as purveyors of paper money. The Government having no hope of ousting them—though it did try more than once—found itself compelled to make the best use of them it could. It was the same dilemma, but in a much more acute form, as that of Secretary Chase in 1861. Here there was no possibility of creating new banks to compete with the existing ones. The latter had to be taken as they were.

The Government and the banks of 1812 hit on a compromise which secured to the latter their note issues, on the understanding that they were to be used as far as possible in the purchase of Treasury notes. The idea, no doubt, was that the notes were to be resold to the public, and fresh issues made as fast as the public would come for them. The operation was certainly less barbaric than flooding the country with "Continental" notes had been. On the other hand, it was much more cumbrous and disturbing to trade. It led to such a state of financial and commercial disorganisation as required years to overcome. The bubble burst in 1814, but as late as 1821 legislative committees were still reporting on the terrible distress it had spread through every state in the Union.

The combination of 1812 between the Treasury and the banks was about the worst arrangement that could possibly have been devised. It imposed on the Treasury a heavy debt, contracted

at spendthrift rates of interest. It misled the banks into note issues far beyond their power to maintain, and equally beyond the real needs of honest business. But for the suspension of specie payments at the opening of the war, not one of them could have lived through it, and, as it was, few of them had that good fortune. The practical working of the arrangement developed some humorous incidents.

The Treasury, in order to create a demand for its notes, made them as attractive as it could. They were to carry interest at $5\frac{2}{5}$ per cent, to be repayable at the end of one year, and to be receivable for customs, duties, taxes, and public lands. The last privilege enabled them to return early and often to the Treasury. When the banks, which by the way had already lent the Government fully forty million dollars, showed no great eagerness to take the one-year notes, the Treasury threatened to retaliate by refusing bank-notes. It also intimated that its deposits would be confined to the banks which showed a proper appreciation of the Treasury scrip.

The good banks which remembered that their first duty was to keep their assets liquid declined, in spite of all these threats, to lock themselves up with Treasury paper not immediately realisable. But the less scrupulous banks were delighted to accommodate the Government, and readily exchanged their paper for that of the Treasury. The latter paid out the bank-notes

in the ordinary course of business, and they got into the hands of the good banks, which presented them to the issuers for payment. Whereupon the issuers calmly declared their inability to pay, for the patriotic reason that their assets were locked up in Government stocks! They could not be made bankrupt without precipitating a crisis; so the holders of their notes had to defer presenting them. It was graciously conceded to them, however, that they might charge interest on the unpaid notes.

Thus arose a curiously ironical situation. The good banks which declined the Treasury notes had to nurse the inferior banks which accepted them. The Treasury got even with both sides, and squeezed the money market far beyond what it could safely bear. These war loans—forced loans they might almost be called—caused a double crisis,—one when they were levied, and a second later on when they were paid off. Altogether the financial effects of the war of 1812 on American trade, both domestic and foreign, were disastrous. Coming as it did on the heels of a banking craze, it could hardly fail to end in a general collapse. In a contemporary description of it we read:—

These early symptoms of a mania for banking induced the [Pennsylvania] legislature on the 19th March 1810 to enact a law prohibiting unincorporated institutions from issuing notes or pursuing any of the operations of banks. But in defiance of its provisions the system

was persevered in, and even companies incorporated for the purpose of constructing bridges departed from the spirit of their charters, converted themselves into banks, and emitted notes for circulation. The war, as might naturally be expected, put a temporary stop to the exportation of specie, and thereby removed the only check on inordinate issues of paper which can possibly exist. This cessation of the return of notes for payment had the effect of inviting the banks to enlarge their issues. Loans were made to Government to an immense amount, and to individuals vastly beyond what the absence of foreign commerce justified. A gradual depreciation of the currency was the result.

Fairly reliable records exist of this depreciation, and at first sight it looks surprisingly small compared with the ruinous fall in "Continental" notes, or even in the greenbacks of 1863. It seems to have touched bottom in the autumn of 1819, when state bank-notes were all at a discount, ranging up to 60 per cent. The New England banks had borne the strain best, and remained within 6 per cent of their par value. Two Southern states, Georgia and South Carolina, made the next best showing with discounts of 8 and 10 per cent respectively. Kentucky and North Carolina both varied between 15 and 25 per cent below par. From what has been said above of the Pennsylvania banks, wide variations in their notes will not seem wonderful. While some of them held up very near to par, others were away down to 50 and 60 per cent discount.

It seems to have been the fate of the two Banks of the United States to get blamed for nearly all the banking troubles of this period. The first one died in 1811, through the refusal of Congress to renew its charter, and the immediate result was a rush of state banking which came to grief in 1814. In a still more direct way the second Bank of the United States caused the second collapse of the state banks in 1819. It had spread out too rapidly, and in order to save itself had to be drawn in all round. Every other bank in the country was endangered by its desperate curtailment. Thus early did it begin to lay up grudges against itself, which at last overwhelmed it on the expiration of its charter in 1836.

The banking crisis of 1819 was short and sharp. It administered a drastic cure to the inflated currency, reducing it, according to some accounts, by one-half. In 1820 it appears to have shrunk to about 45 million dollars, a comparatively safe level. But no sooner did the "soft money" makers land on their feet than they were trying to fly again. In 1824 a new banking boom was in full blast. The Legislature of New York State during the session 1824-25 passed bills for chartering new banks, insurance companies, and other financial institutions aggregating 52 million dollars of capital. London was partly responsible for this particular boom. Our mining mania of

1824 gradually infected all the other markets. It was followed by a rush of foreign loans—chiefly South American—and by a furious gamble in colonial produce.

In April Upland cotton rose from 20 to 27 cents, coffee from 17½ to 21 cents, and Muscovado sugar 1 dollar per cwt. In New York and Philadelphia these wild advances were repeated with suitable exaggerations and correspondingly bad effects. The banks, rising at once to the occasion, let loose another torrent of paper money. Had the gamble lasted long, it might have ended in a greater catastrophe than that of 1814, but providentially it was short-lived. The bubble burst almost in the blowing. Another period of severe contraction followed, this time a much longer one than usual. In normal times markets might have righted themselves in a few years, but before they had the chance to do so a banking war of the worst kind threw everything again into confusion.

In 1829 President Jackson in his first message to Congress declared war on the Bank of the United States. Its charter did not expire till 1836, consequently the issue between the state banks and the national bank could not be definitely settled for seven years. Meanwhile banking and commercial credit was completely at the mercy of the politicians. In the end President Jackson and the state banks won a

fatal victory. In refusing to the United States Bank a renewal of its charter, they destroyed a great financial institution as well as a powerful competitor. But, like Samson pulling down the gates of Gaza, they involved themselves in its ruin. The void created by its fall they hastened to fill up in the usual "wild-cat" fashion with state bank-notes. In an incredibly short period the aggregate circulation of these jumped up from 61 million dollars to 149 millions. Almost as quickly it rushed back on its issuers and overwhelmed them.

On the 10th May 1837 nearly one-half of the state banks closed their doors. Out of 959 all but 498 had to suspend payments, either temporarily or permanently. The revulsion in the note circulation was terrific. In 1843 it had fallen to 55 million dollars—not much more than a third of what it had risen to in the suicidal boom of 1836-37. This was a tremendous blow to "soft money" and "wild-cat" banks. They never, in fact, got thoroughly over it. When the national bank system was proposed by Secretary Chase, with its absolute guarantee for every note issued, the state banks could offer very little resistance to it. Their political power was gone, and the people were heartily sick of "soft money"—at least, of that particular kind which had been so prodigally provided by the state banks. Two or three later varieties of it had to be endured

before it was finally got rid of—notably, silver certificates and the Treasury notes of 1890. But these spectres also have been laid, and the United States has now a substantial claim to rank among the "hard money" countries.

BOOK I.—ITS EVOLUTION.

CHAPTER V.

THE GREENBACK *RÉGIME.*

SOME years ago the writer was travelling on the Mexican Central Railway, and had for fellow-passenger a bright little man from Missouri. He had been down to Mexico city with an experimental shipment of cattle, and was returning home evidently pleased with his trip. The refrain of his conversation was, "I reckon it's been worth five hundred dollars to me." In reply to a sympathetic question he launched into details, which showed that he was at least a hundred dollars on the wrong side. When this was pointed out to him he replied quite cheerfully, "Oh yes; but I guess I've had five hundred dollars' worth of experience."

That Missouri man was a typical American. If there is one thing more distinctive of Americans than another, it is the value they set on experience, and the good use they make of it. As a people they digest their experiences just as systematically as the British public forget theirs. This

is true of their political as well as of their commercial and industrial life. Every important event in their national history has been copiously recorded, studied, criticised, and discussed. On any question of law or finance that may turn up, precedents are always in overwhelming supply. They are drawn with equal facility from the War of Independence, the battles of the Federalists and the Democrats, over the framing of the Constitution, the long feud of the state banks and the Treasury, the free soil campaign, and finally the Civil War itself.

The greatest of all American experiences from every point of view was, of course, the Civil War. It has a financial literature of its own with which every educated American is fairly well acquainted. I doubt if there be half a dozen men in the British House of Commons, both front benches included, who have the faintest idea how Pitt raised the hundreds of millions sterling which he spent in fighting Napoleon. As to the financing of the Crimean War, all they remember about it is that Mr Gladstone did some clever strokes of finance in connection with it. The recent Boer War, though only four years old, is almost as completely forgotten—financially—as Balaclava and Torres Vedras. All that the average Englishman could say about it to-day is that "it cost a good bit"—over two hundred millions—and threw a heavy load of new securities on the Consol market.

The Americans have treated the finance of their civil war with much more consideration. They have studied it retrospectively in a practical and business spirit. Knowing that some grave errors had been committed in connection with it, they have frankly and honestly tried to get at the origin of these errors, in order to be able to avoid them in future. Books, pamphlets, and official reports galore have been written on the subject. All branches of it—the war taxes, the loans, the greenbacks, and the gold premium—have been investigated with equal zeal and acuteness. A fairly good agreement has been arrived at on the main points of the inquiry, but even yet it is by no means closed. So recently as 1897 a very exhaustive paper on the greenbacks and the cost of the civil war, by Mr W. C. Mitchell, appeared in the 'Journal of Political Economy.' Dewey, in his 'Financial History of the United States,' prefaces the chapter on legal tenders with a list of thirty different works of reference.

No American of the present day has thus the slightest excuse for not forming some opinion of his own as to the many difficult financial questions that arose out of the civil war. He can judge by their recorded results the various expedients that were adopted for raising money. He can see how cruel and relentless was the emergency that had to be faced. Looking back on it all, he can lay his fingers on the mistakes of those who had to stand in the desperate

breach. He can say what might have been better done or better left undone. But on a calm survey of the whole crisis he will be inclined to admit that Uncle Sam got through it pretty well after all. Naturally it was followed by a severe penitential fit, in which the most pessimistic view was taken of everything. Legal tender notes at 60 per cent discount, and United States Six per cent Bonds, selling in London at 40, may be awful memories to look back upon, but they were part of the price that had to be paid for preserving the Union, and the Union was preserved.

As we recede from those terrible days of national peril, a calmer and more charitable view of its financial sins becomes possible. In fact, it has already begun to assert itself. Qualifying circumstances come to light which materially tone down the lurid picture of 38 cent paper dollars and gold at 288. Even the greenbacks are discovered to have been not quite so bad as they were painted. There was never any occasion for patriotic American bankers to demand that they should be wiped out as a relic of shame and insolvency. It would have been almost as unreasonable in English bankers, after the great war with France, to insist on Bank of England notes being abolished, because during the war they had been practically a forced currency. There must be some absolution even for paper money when it shows genuine marks of reform as the greenbacks of to-day certainly do. A trifle

of 346 million dollars of Treasury bills, with nearly fifty per cent of a gold cover, and the credit of the United States behind that again, should be able to live down even a worse past than that of the greenbacks.

Many things may be said in extenuation of the once abused greenback, and it surprises me that some of them have not been said sooner. But even Americans themselves have done scant justice to the greenback. At an early period in its history it got a bad name—too bad a name, in fact, for the worst part of its career, and one which it did not deserve for more than a few years. Moreover, it was not the only sinner against sound finance in the crowd of fancy currencies and assorted securities which Secretary Chase had to press on a coy and impecunious market. It is a debatable point if the "Seven Thirties" and one- and two-year notes of 1863 were not more improvident than the greenbacks. But they were more fortunate in having been speedily withdrawn, while the greenbacks survived to bear all the brunt of critical odium.

To limit the present inquiry to the narrow and partial views which have been hitherto taken by most writers on civil war finance would, it seems to me, be unjust not only to the financial operations themselves, but to the able men who were responsible for them. The time has come for taking the broadest possible view of the question, and at the same time a business rather than a

theoretical view. Currency idealists cannot possibly be fair judges of war finance, or indeed of any kind of emergency finance. The experience of the past half century has taught business people that currency at its best must be a rough-and-ready device. The proper test for it is not whether it is ideally scientific or perfectly logical, but how it does its work. Such is the test we aim at applying to the "greenback *régime*," which, needless to say, embraced many other kinds of paper than greenbacks.

Our first question then is, Could the flood of paper money issued for war expenditure between the years 1862 and 1865 have been avoided? The next is, Were there any alternatives that might have been adopted with hope of better results? Thirdly, Might the issues have been better regulated so as to make smaller amounts suffice? Fourthly, May they not have tended to counteract evils which would have arisen from any other possible alternative? For example, if there had been no greenbacks there must have been larger issues of interest-bearing bonds, with the certain effect of still further depreciating them.

The business question on which everything turns is, Could the two thousand eight hundred million dollars that had to be raised (outside of taxes) for war expenditure have been raised in any other way at smaller cost to the Government, and with less loss to the public? In order

to answer that, we must ascertain as best we can what the paper money actually did cost to both parties. On these points many American writers and politicians have expressed what appear to me to be extravagant opinions. They have exaggerated in their own minds the proportion which the paper money bore to the interest-bearing bonds and to the total amount of the war debt. They have also failed, I think, to take sufficiently into account the comparatively short duration of high gold premiums and very low paper values.

These are spoken of as if they had lasted for years, when, in fact, excessive depreciation did not continue more than a few months. The war opened on April 12, 1861, and specie payments were suspended on December 28 following, but gold did not rise to a tangible premium till six months later. On April 1, 1862, it was quoted at 102, and on July 5 it touched 110. United States bonds, instead of falling in proportion as by rights they should have done, actually advanced from 89 to par. The year 1863 began with gold at 134½, and Six per cent Bonds at 93—in currency, of course, which would be equivalent to nearly 73 in gold. At the end of 1863 gold was still about 150, by no means a panic price under the circumstances.

The gold scandals which so seriously compromised the credit of the Government, and reduced it for a time to a rag-money basis, all

occurred in 1864, and the greater part of them in the second half of that year. Between January 2 and June 11 gold showed a moderate advance from 152 to 191. On July 11 it jumped to 285, and the highest quotations for the next five months were—August 6, 261¾; September 3, 243½; October 1, 193¾; November 5, 244¾; December 12, 237½. The corresponding equivalents for paper dollars were—August 6, 38 cents; September 3, 40 cents; October 1, 51½ cents; November 5, 41 cents; and December 12, 42 cents. The paper dollar touched bottom on July 11, 1864, at 35 cents gold; but, as will be seen, it remained there for a very short time. At the beginning of October it was again well over 50 cents, and at the close of the fiscal year (June 30, 1865) it was a little over 70 cents.

A 35 cent paper dollar, even if it had continued for a few years instead of only a few weeks, could not have permanently crippled a country like the United States. Only the other day another American republic was struggling, through no fault of its own, with a 35 cent silver dollar. The depreciation had been dragging on for thirty years, and there was no visible end to it. Mexico, by a heroic effort, checked the decline; and to-day she is proud of having restored her silver dollar to the modest level of 50 cents in gold. Compared with her prolonged agony, all that the United States had to endure

was a momentary inconvenience. Almost as much trouble resulted from the Bland dollar and the Treasury notes of 1890 as from the greenbacks,—with this important difference, that in their case the trouble was entirely self-made and gratuitous. They had not the excuse of being war measures, or even of being "elastic currency."

Heavy loss and widespread suffering did certainly result from the greenbacks. It will be interesting and instructive to find out where that loss fell. It can only have been of two kinds—first, loss to the Government in issuing the notes; and second, loss to the public in circulating them. According to a Treasury circular of July 1, 1904, there were three successive issues of $50,000,000, each authorised by Congress: the first on February 25, 1862; the second on July 11, 1862; and the last on March 3, 1863. The maximum issue of $449,338,902 was reached on January 30, 1864, and their redemption began eighteen months later. It might have been completed in a very few years if Congress had not again and again suspended it. The financial authorities at Washington could not, in fact, make up their minds whether or not it would be wise to get rid of the greenbacks completely. When they had been reduced to $346,681,016 they were left alone, and they have remained at that figure ever since. They now occupy in the United States

Treasury an analogous position to that of the 14 millions sterling of Government securities in the Issue Department of the Bank of England. In deciding on their final and definite form, the English model was followed as closely as the two very different situations admitted.

The following table (p. 102) shows the amount of the greenbacks outstanding at the end of each fiscal year from the commencement to the completion of their original issue. A second column states the amount issued in each year, and a third column gives their gold value on the last day of the year. With these data we may calculate roughly the loss that the Treasury suffered through having to issue them at a steadily increasing discount, due to the continuous rise in the gold premium. By taking the price at the close of each fiscal year, we are making the calculation as unfavourable as possible to the greenbacks. A fair average of the whole year, if it could be obtained, would of course show better for them than the last price of the year, which as a rule was also the lowest.

For instance, the gold price of the paper dollar on the 30th June 1862 was 86·6 cents, and the greenbacks outstanding on the same date amounted to $96,620,000. But they had been issued on a descending scale from par downwards. If we value them all round at 86·6 cents, and treat the 13·4 cents discount at so much loss

to the Treasury, that will be a very liberal estimate. At the end of the fiscal year, 1862-63, we find that the amount outstanding had increased by fully 200 million dollars, while the gold value had declined to 76·6 cents, or 23·4 cents discount. Assuming that the whole 200 millions had been issued at 76·6 cents, though as a matter of fact the average for the year would be substantially higher, so much additional loss will have to be debited to the greenbacks.

During the next year (1863-64) a net increase of 133 million dollars took place. Owing to wild speculation in gold, the gold value of the paper dollar — not greenbacks merely, but Treasury notes and bank-notes of all kinds—had dropped to 38¾ cents, or a discount of 61¼ cents. But a comparatively small portion of this year's new issues had started so badly as this. As has been already stated, the maximum amount reached was $449,338,902 on the 24th January 1864. Here ended the original loss to the Treasury. After they got into circulation all further depreciation would fall on the public, and that has to be dealt with later. The gold value of the paper dollar at the end of January 1864 was about 66 cents, consequently the final batch of 18 million dollars of greenbacks had been issued at a discount of not more, and possibly rather less, than 34 cents. The aggregation of all these discounts, as shown below, will fairly represent

the original loss to the Treasury on the whole $449,338,902 of greenbacks:—

	Amount outstanding.	Net increase during previous year.	Gold value of paper dollar (in cents).	Gold value of the year's new issue.
June 30, 1862	$96,620,000	...	86·6	$83,672,920
1863	297,767,114	$201,147,114	76·6	154,078,602
Jan. 24, 1864	449,338,902	151,571,788	66·6	101,047,859
June 30, 1864	431,178,671	18,160,231*	38·7	...
				$338,799,381
	Total issue at par value . . .			449,338,902
	Total discount on original issues .			$110,539,521

Average rate of discount, 25 per cent.

* Decrease.

All things considered, that was not such a bad operation for the Treasury as has been generally assumed. The 25 per cent discount it sacrificed on their original issue represented little more than four years' interest at the rate it was paying on its Six per cent Bonds. For over forty years the Treasury has had the use of between 300 and 400 millions of dollars for the mere cost of circulation plus interest on 100 million dollars of a gold reserve. The latter was increased in 1900 to 150 million dollars, but even that at 2 per cent costs only three million dollars a-year, equal to

less than 1 per cent per annum on the amount of greenbacks now outstanding.

On the other hand, it may be objected that the issue of the greenbacks was not an ordinary financial operation,—that it had far-reaching effects in other directions. A very frequent charge brought against it is, that it raised the prices of all commodities, and thereby aggravated the cost of the war. Mr Knox puts this point strongly in his 'United States Notes.' Referring to Treasury paper generally, he says:—

> Specie payments were suspended on December 28, 1861. The war was carried on chiefly by the use of Treasury notes as a circulating medium. The purchasing power of these notes rapidly declined. Prices of all kinds advanced rapidly, and particularly prices of articles most needed for the supply of the army. Expenditures of the Government during the four years of the war were vastly increased beyond the amount which would have been necessary if the war could have been conducted upon the gold standard instead of upon the fluctuating standard of the legal tender paper dollar.[1]

This is an obviously one-sided and misleading account of the currency inflation which took place during the Civil War, and still more so of its effects. Mr Knox lays all the blame of high prices on the legal tender dollars—the official name for greenbacks. One might infer from what he says that they had been the cause of the suspension of specie payments, of the decline in the

[1] 'United States Notes,' by John Jay Knox, p. 84.

value of paper money, of the consequent rise in prices, and of most of the other monetary troubles that hampered the progress of the war. The facts are, that specie payments had been suspended two or three months before the first legal tender note was issued; that these notes formed less than one-seventh of the total amount of credit that had to be created for carrying on the war; and that during the first half of the war there were quite as many bank-notes in circulation as Treasury notes. These helped materially to swell the mass of uncovered paper that accumulated after the suspension of specie payments. In 1862 the greenbacks formed less than a fourth of the total paper money in circulation, and even after they had reached their maximum issue they were seldom as much as one-half of the total. There were five other sorts of credit currency in circulation, excluding fractionals. Their relative shares in the monetary worth of the country may be learned from their respective amounts in successive years, as shown below:—

[TABLES

DIFFERENT CLASSES OF UNITED STATES CREDIT CURRENCY, 1862-70.

June 30.	State bank-notes.	National bank-notes.	Demand notes.	Legal tenders.	One- and two-year notes, 1863.	Compound interest notes.
1862	$183,792,079	...	$53,040,000	$96,620,000	...	...
1863	238,677,218	...	3,351,020	297,767,114	$89,879,475	...
1864	179,157,717	$31,235,270	780,999	431,178,671	153,471,450	$15,000,000
1865	142,919,638	146,137,860	472,603	432,687,966	42,338,710	193,756,080
1866	19,996,163	281,479,908	272,162	400,619,206	3,454,230	159,012,140
1867	4,484,112	298,625,379	208,432	371,783,597	1,123,630	122,394,480
1868	3,163,771	299,762,885	141,723	356,000,000	555,492	28,161,810
1869	2,558,874	299,929,624	123,739	356,000,000	347,772	2,871,410
1870	2,222,793	299,766,984	106,256	356,000,000	248,272	2,152,910

PROPORTION OF LEGAL TENDERS TO TOTAL CREDIT CURRENCY.

June 30.	Legal tenders.	Total credit currency.	Percentage of legal tenders.
1862	$96,620,000	$333,452,079	29
1863	297,767,114	649,867,283	46
1864	431,178,671	833,718,984	52
1865	432,687,966	982,318,685	44
1866	400,619,206	891,984,686	45
1867	371,783,597	826,927,153	45
1868	356,000,000	720,412,602	49
1869	356,000,000	693,946,056	51
1870	356,000,000	700,375,899	50·8

The above tables indicate, first of all, the excessive complexity of the currency movements that took place during the Civil War. This may have been due partly to the great difficulty of raising money at home, and partly to the extreme ingenuity which Americans always bring to bear on questions of currency. Their besetting sin in those days was a craze for monetary experiments, and they are not entirely free from it yet. Considering the variety of their experiments and the crudeness of some of them, it is hardly surprising that they should have frequently overreached themselves. No less than five new types of currency were specially improvised during the war,—all of them intended only for temporary use. Two of them, the demand notes of 1861 and the one- and two-year notes, disappeared before the war was finished, and the compound interest notes followed soon after. Only two of

the improvisations — the legal tenders and the national bank-notes — secured a permanent footing in the currency system, and that was not till after prolonged struggles, which are not definitely settled even yet.

Thus it will be seen how unfair and incorrect is the popular notion that the greenbacks or legal tender notes were the main cause of the breakdown of national credit at a critical stage of the war. If they had not been preceded by $50,000,000 of demand notes, which, owing to their having been issued while specie payments were still in force, were redeemable in gold, thus aggravating the demand for gold; and if they had not been followed by large issues of one- and two-year bills and compound interest notes,—they need never have fallen into serious discredit. When they reached their maximum issue in January 1864 the total amount of credit currency in circulation must have been well under 800 million dollars, for it only stood at 833 millions on the 30th June following. The gold value of the paper dollar was then about 66 cents, and it might have been held there but for the enormous additions made in the following year, not of greenbacks but of compound interest notes. They increased, it will be seen, from a total of 15 millions in June 1864 to 193 millions in June 1865.

As a form of currency inflation the greenbacks had done their worst in the early part of 1864,

and the disasters which marked the latter part of that year were obviously due to other causes. One was the desperate resort of issuing compound interest notes, and another was the Gold Corner. It took a couple of years for business to recover from these two violent shocks, but in June 1867 we find the credit currency reduced again to the manageable volume of 827 million dollars, combined with the natural sequel of a rise in the gold value of the dollar to 71·7 cents. In the three following years (1867-70) the volume of currency was further reduced to 700 million dollars, a normal level in the circumstances, and the dollar further appreciated to 85·6 cents. From this point it advanced with speculative fluctuations to par in 1879, when specie payments were resumed.

Mr Knox's second charge against legal tenders —that they caused a rapid advance in prices, "particularly in the prices of articles most needed for the supply of the army"—also weakens considerably under closer examination. Prices did rise during the war, but not by any means in the same degree as the gold premium. They would have risen a good deal in consequence of the war itself, even if it had been fought on a gold basis. Moreover, in so far as the high prices were for the most part paid to the domestic producer, the community as a whole may have been no great loser by them. According to Dewey, "the total effect of paper issues in increasing the cost of the war has been estimated at between 528 and

600 million dollars." He adds that "even this large amount is small compared with the burdens which inflated prices placed upon the people in the ordinary relations of trade and industry."

On referring to the index prices for commodities and wages given in the Aldrich Report for the years 1860-65, we find no advance either to compare with the rise in gold or to justify Mr Dewey's estimate of the consequent increase in the cost of the war. The figure he names—between 528 to 600 million dollars—will cover the increase not only in the cost of the war but in the total expenditure of the Government in the war years. And the latter is the test that should be adopted, for if the greenbacks enhanced one branch of public expenditure they enhanced all. Subjoined are the results of the Aldrich index prices applied to the total expenditure of 1862-65:—

EFFECTS OF RISE IN PRICES ON GOVERNMENT EXPENDITURE, 1862-65.

	Expenditure in currency.	Index Prices.		Average of both.	Expenditure on basis of old prices.
		Commodities.	Wages.		
1862	$565,667,564	117·8	102·9	110·4	$512,380,000
1863	899,815,911	148·6	110·5	129·5	697,155,000
1864	1298,541,115	190·5	125·6	158·0	820,000,000
1865	1906,433,331	216·8	143·1	180·0	1059,130,000
	$3667,457,921				$3088,665,000
Net addition to public expenditure through higher prices					578,792,921

On the most unfavourable view that can be taken of it, the Government's share of the loss caused by the greenbacks would be $110,539,000 for discount on their original issues, and $578,793,000 for enhanced cost of the war and the public service generally during the war period. Total $689,332,000 of an invisible tax levied on the people over and above their visible taxes. This admits of very little discussion, but the ground is not so clear when we turn to the losses of the people themselves "in the ordinary relations of trade and industry," as Professor Dewey puts it. In individual cases these were doubtless very severe, but they were offset by enormous gains in other individual cases, and a balance has to be struck if possible between the two.

Within the sphere of domestic trade fluctuating standards of value may cause great inconvenience, but to the community as a whole they cannot do very serious harm. Recent experience has greatly modified, if not actually disproved, the old maxim of currency theorists that an unsteady monetary standard is an unqualified misfortune. It has its qualifications and compensations which demand the most minute comparison before judgment can be safely pronounced on them. The only definite determinable question as to inflated currency is the effect it may have on the foreign trade of a country. Here, too, it works both ways as in domestic trade, but with the difference that its workings can be followed and compared. In the

subjoined table an endeavour is made to show what effect the depreciated greenbacks had on the imports during the seventeen years of suspended specie payments (1862-79). The first column gives their gold value year by year; the second, the gold value of the dollar at the end of each year; and the third the currency value of the year's imports. The excess of currency over specie values is the cost to the importers of the depreciated dollar.

UNITED STATES IMPORTS. EXCESS OF CURRENCY OVER SPECIE VALUES.

June 30.	Gross imports.	Gold value of dollar.	Cost of imports in paper dollars.
1862	$189,356,677	86·6	$218,656,700
1863	243,335,815	76·6	317,670,700
1864	316,447,283	38·7	817,700,000
1865	238,745,580	70·4	339,127,200
1866	434,812,066	66·0	652,218,000
1867	395,761,096	71·7	552,000,000
1868	357,436,440	70·1	509,890,000
1869	417,506,379	73·5	568,036,000
1870	435,958,408	85·6	509,300,000
1871	520,223,684	89·0	584,521,000
1872	626,595,077	87·5	716,110,000
1873	642,136,210	86·4	741,900,000
1874	567,406,342	91·0	623,523,400
1875	533,005,436	87·2	611,245,000
1876	460,741,190	89·5	514,795,000
1877	451,323,126	94·7	476,577,000
1878	437,051,532	99·4	439,700,000
	$7267,842,341		$8892,970,000

1625,127,659, extra cost of imports.

Average gold price of dollar, 80 cents.

On the whole seventeen years of suspended specie payments the paper dollar averaged 80 cents in gold, a depreciation of 20 per cent. American importers may therefore be said to have had to pay 20 per cent more for their goods than they might have done under a gold standard. This, however, would be the maximum effect, without taking into account any of the hundred and one factors which might have counteracted it in practice. We have also to take note of factors which may have aggravated it—as for instance, the fact of American imports having been greatly in excess of exports not only during the war but for eight years after.

UNITED STATES FOREIGN TRADE, 1862-78.

June 30.	Imports.	Exports.	Excess of Exports.	Excess of Imports.
1862	$189,356,677	$190,670,501	$1,313,824	...
1863	243,335,815	203,964,447	...	$39,371,368
1864	316,447,283	158,837,988	...	157,609,295
1865	238,745,581	166,029,303	...	72,716,277
1866	434,812,066	348,859,522	...	85,952,544
1867	395,761,096	294,506,141	...	101,254,955
1868	357,436,440	281,952,899	...	75,483,541
1869	417,506,379	286,117,697	...	131,388,682
1870	435,958,408	392,771,768	...	43,186,640
1871	520,223,684	442,820,178	...	77,403,506
1872	626,595,077	444,177,586	...	182,417,491
1873	642,136,210	522,479,922	...	119,656,288
1874	567,406,342	586,283,040	18,876,698	...
1875	533,005,436	513,422,711	...	19,562,725
1876	460,741,190	540,384,671	79,643,481	...
1877	452,323,126	602,475,220	151,152,094	...
1878	437,051,532	694,865,766	257,814,234	...

Thus, so far from the *débâcle* in United States currency which took place during the war having been caused by issues of Treasury paper, there were various contributory causes. The war itself was the chief cause of all the financial trouble, which would have only been less in degree had the gold standard been maintained. Among the collateral causes were the bad condition of the Treasury before the war began; the small stock of gold in the country; the enormous strain suddenly thrown on the credit of the country; the paralysis of its export trade, coincident with a great and absolutely necessary increase in its imports. Every financial and commercial condition took an adverse turn.

Applying these varied facts to the questions with which we set out, the following answers may be given. First: Large paper issues were rendered unavoidable by the small stock of gold in the country at the beginning of the war, and the speedy suspension of specie which consequently took place. Either the Treasury or the banks had to make these issues, or they had to do it jointly. In the end they did co-operate under the national bank scheme. Secondly: The only alternative to large paper issues would have been a heavy addition to taxes already of crushing weight, or forced sales of Six per cent Bonds. The latter would have driven prices lower and lower both in the home and foreign markets. As it was, only the gold prices of the bonds fell

very low, and they recovered as fast as the gold premium ran off.

It is a significant fact that when the pressure of paper money became most acute the Six per cent Bonds freed themselves from its influence in the home market. During the last two years of the war they were never under par in currency, and often they were well above it. From this point of view a comparison of their currency and gold prices may be rather instructive:—

UNITED STATES SIX PER CENTS, 1862-64.

	Currency price.	Price of gold.	Gold price of bonds.
1862			
March 1 . . .	92½	102½	90
Sept. 6	99¾	119¼	84
1863			
March 7 . . .	100¾	155½	65
Sept. 5	106	131¾	80
1864			
March 5 . . .	111	161⅞	68½
July 11	102¾	285	36
Oct. 1	106½	193¾	55
Dec. 12	108⅝	237½	46

To the third question, as to whether the paper issues might have been better regulated so as to make a smaller volume of them suffice, the answer is obvious. To be lavish of paper money has been a besetting weakness of the Americans from their colonial days. Fourth: May not the paper issues have atoned to some extent for their own

vices by averting evils and dangers of some other kind? As a matter of fact, when the pinch came Secretary Chase had very little choice left him. He might have accepted the invitation of the associated banks to put himself in their hands, but that would have involved unlimited and perhaps uncontrollable issues of bank paper. At the same time, it might have compromised the independence of the Treasury, and Mr Chase was wise to defend that to the utmost. Events have proved that it was worth saving.

It may seem almost an idle question to ask if a recurrence of the greenback *régime* is possible. All the conditions of American finance have changed so completely since the Civil War, that it now looks like an inconceivable episode. Instead of a dearth of gold the United States has now a glut; instead of a damaged credit it has now the highest; instead of 800 or 900 million dollars of uncovered paper it has nearly two and a half times as much metallic money as all its Treasury and bank-notes combined. Paper money has ceased to be a danger or even a difficulty. It is the threatened plethora of specie that is to be the question of the future.

BOOK II.

ITS ORGANISATION

BOOK II.—ITS ORGANISATION.

CHAPTER VI.

ITS THREE BILLION DOLLAR CURRENCY.

THE United States is now beyond dispute the richest nation in the world. It has also the largest amount of money in circulation as well as the greatest variety of money. But these exceptional advantages do not appear to produce their natural results. Instead of the monetary ease and stability that might be expected from them, we find chronic instability accentuated at short intervals by sharp spasms of stringency. During the past year (1905) the money market of New York has made a world record for the extreme range of its loan rates. These have been down to 2 per cent in Wall Street, and up to 125 per cent if not higher. Both the minimum and the maximum are without parallel anywhere else. And New York is the last place in the world where either of them should have occurred. The immense volume of its current business ought to have prevented excessively low rates, while the huge mass of money in circulation should,

if prudently handled, have made sensational stringency impossible. Yet they both occurred within a few months of each other, and Wall Street, which should know best what caused them, has as yet been able to suggest only one explanation—inelastic currency.

There are, however, few people who accept that explanation unreservedly, and feel satisfied with it. The American people as a whole have little confidence in it. Outside of a special circle, American bankers are openly sceptical about it. Foreign authorities have almost unanimously declared against it. There is a *prima facie* case against a three billion dollar currency ever being fully utilised by any single nation, however large and prosperous. It is an impossible amount to keep in *bonâ fide* commercial circulation, even among eighty-three millions of busy people. And very brief inquiry confirms this preliminary doubt. Of the three billion dollars, less than 60 per cent is in the hands of the public. The other 40 per cent has accumulated partly in the Treasury, and partly in the banks, where it has other purposes to serve than public circulation.

If the whole three billion dollars were in actual use, it would give the American people an average per head of 35 dollars. Only three other countries in the world are more generous with their currency. The republic of Colombia has a long lead in the amount per head of money it provides its people with. At the end of 1904 its four

millions of a population had 741 millions of paper money circulating among them—an average of 190 dollars per head. With that amount of gold or even silver dollars, every Colombian would have been "independently wealthy." But unfortunately they were only paper dollars. Colombia has a gold standard law on its statute book. It was passed in 1903, but has as yet got no farther. The total amount of gold in the Republic has been estimated at 200,000 dollars, consequently the prospect of the 741 million paper dollars ever getting on a metallic basis is somewhat desperate.

The second largest average per head is that of Argentina, nearly 69 dollars. France still holds third place with a monetary supply of fully 37 dollars per head. And the United States comes fourth with 34·68 dollars per head of a total stock, or 31·34 dollars per head of actual circulation. These are the only four countries in the world that need more than 30 dollars per head of currency. A clear grasp of that fact will help to put the United States currency in its proper perspective. Four other countries—Germany, Belgium, the Netherlands, and Canada—require between 20 and 30 dollars per head. The only commercial State of the first rank that can transact its business with less than 20 dollars per head of legal money is the United Kingdom. Its total stock of money at the end of 1904—gold, silver, and uncovered paper—was estimated at 764

million dollars, or 150 millions sterling, being an average of only 17½ dollars per head.

The two States that stand nearest the British level are Spain and Switzerland, with averages of 19·82 dollars and 19·18 dollars per head respectively. Austro-Hungary and Italy are in a category by themselves, with very low averages—9·04 dollars and 9·26 dollars respectively. After duly weighing all the special circumstances and conditions of these various countries, we may conclude that 20 dollars per head is about the normal supply of currency for an active State well organised and well equipped with banking facilities. The Austrian and Italian 9 dollars per head would seem to be about as much short of an adequate allowance as the American 35 dollars and the French 37 dollars per head exceed it. Details of the twelve currencies, showing the largest averages per head, are set out in the subjoined table (p. 123), condensed from the report of the Comptroller of Currency for 1905-06.

Putting aside the republic of Colombia and its 190 dollars per head, the first three countries in the list—Argentina, France, and the United States—hold an anomalous position in respect of their currencies. An adequate explanation may not be far to seek in the case of France or Argentina. The French are a money-hoarding people, while the Argentines are in process of emerging from a long period of rag-money. But neither of these explanations will serve for the

United States. The Americans are not a money-hoarding people, and for years they have been done with rag-money. There is nothing in their social or commercial habits, nothing in their monetary laws, nothing in their financial position, to suggest any need for more than a normal average per head of currency.

THE WORLD'S LARGEST STOCKS OF MONEY, DECEMBER 1904.

	Per head in dollars.	Gold.*	Silver.*	Uncovered paper.*
Colombia . . .	$190	$200,000	...	$741,000,000
Argentina . . .	$68·88	$72,100,000	...	$286,100,000
France	37·13	926,400,000	$411,000,000	110,900,000
United States .	31·34	1348,200,000	685,100,000	539,900,000
The Netherlands	26·76	36,500,000	56,800,000	51,200,000
Belgium . . .	23·80	30,000,000	9,700,000	111,900,000
Australia . . .	23·63	128,600,000	6,100,000	...
Germany . . .	22·46	886,700,000	170,100,000	169,800,000
Canada . . .	21·43	52,500,000	6,700,000	65,100,000
United Kingdom	17·58	533,200,000	113,400,000	118,100,000
South Africa . .	10·70	56,000,000	20,000,000	...
Italy	9·26	131,400,000	25,600,000	150,700,000
Austro-Hungary.	9·04	305,000,000	79,700,000	54,700,000

* All in dollars.

The cause of this anomaly is not to be found in the ordinary channels or conditions of trade. It must therefore be looked for in the byways and side channels of politics. It must be hunted for in official reports and returns. Whoever would attempt to solve the mystery of the three

billion dollar currency must familiarise himself with the records of the United States Treasury, the Mint, and the Currency Department. From these he may learn how the three billion dollars of currency gradually accumulated until it far overshot the work there was for it to do. When we find out where the three billion dollars really are, how they are distributed, and what they are doing, it may appear that many of them are like the unprofitable talents in the parable—hid in a napkin. They have no real claim to be considered currency, because they are not doing proper currency work.

In itself, and quite apart from its many political and economic bearings, a three million dollar currency is an interesting phenomenon. It is unique in financial history, such a thing having never existed before, or being ever likely to find a parallel hereafter. The chief results of our analysis will be found below in a series of tables intended to illustrate—(1) the composition of this huge stock of money; (2) its gradual accumulation in the past forty years of American expansion; (3) its varying proportions of gold, silver, and paper; (4) its erratic distribution between the Treasury, the banks, and the public; (5) its averages per head of the population. A second series of tables is designed to trace the relations between the three billion dollars of currency and the great banking and commercial movements in which it is involved. A third series

attempts to discover what bearing it has, if any, on the foreign trade of the country, especially on the imports and exports of specie. The final table compares, or rather contrasts, the rapid growth of the currency with that of the national revenue and expenditure.

Table I. (p. 126) combines two views of the currency—one showing its composition, and the other its historical development since 1860.

Taking these columns in their order, the financial reader will be struck, first of all, by the huge accumulation of gold and silver now possessed by the United States, and next by the accelerating rate at which that accumulation grows. In the past ten years (1896-1905) it has gained nearly as much as it did in the preceding thirty-six years (1860-1896). Over four hundred millions sterling of metallic money should assure the most nervous of nations against any currency famine. That assurance should be doubled by the exhibit made in the second column of only 851 million dollars of paper against 2031 million dollars of gold and silver. Over 60 per cent of the whole stock of money in the country is metallic. If we regard the cash balances of the Treasury as dormant circulation, which in normal times they really are, the proportion of "hard" money to "soft" money will be considerably larger.

Another redeeming feature of the paper money is, that though it continues to grow it is relatively a diminishing factor in the currency as a whole.

I.—STOCK OF MONEY IN UNITED STATES, 1860-1905.

Year.	Gold and silver.	U. S. and bank-notes.	Total money.	Belonging to Treasury.	In circulation.
1860	$235,000,000	$207,102,000	$442,102,000	$6,695,000	$435,407,000
1865	25,000,000	745,129,060	770,129,000	55,426,000	714,703,000
1878	102,047,000	687,743,000	789,790,000	60,658,342	729,132,000
1890	1152,471,000	532,651,000	1685,123,000	255,872,000	1429,251,000
1896	1097,610,000	702,364,000	1799,975,000	293,540,000	1506,435,000
1900	1607,352,000	732,348,000	2339,700,000	284,549,000	2055,151,000
1905	2032,296,000	851,813,000	2883,109,000	295,227,000	2587,882,000

1860. On the eve of the Civil War.
1865. At the close of the Civil War.
1878. On the eve of the resumption of specie payments.
1890. The year of the Sherman Law.
1896. The McKinley election year.
1900. The new National Bank Law came into force.

Between 1865 and 1890 it steadily declined, both absolutely and relatively. From 1896 onward it has increased, owing to the multiplication of national banks. The law of 1900, which facilitated in various ways the organisation of national banks, gave a strong stimulus to their issues. The advance shown in the paper money column, from 732 million dollars in 1900 to 851 millions in 1905, arose entirely from new creations of national bank-notes. Practically the whole of these notes have gone into active circulation. Unlike gold they do not get shelved in the Treasury. The issuing banks have too great an interest in keeping them out to let them lie idle anywhere if they can prevent it.

The Treasury itself is becoming less of a disturbing factor in currency than it used to be. It intercepts a diminishing share of the new money created or imported. During the past decade it has, in fact, made no addition to the dormant money in its vaults. On the contrary, the total of 1905 is, as will be seen in the Treasury column of the above table, nearly two million dollars smaller than it was in 1896. The 934 million dollars of new specie acquired, and the 150 million dollars of new notes issued during that decade, all went into circulation. These important changes are further detailed in the next table.

Table II. makes it still more clear that the best class of currency, namely gold, is also the most expansive. In the decade 1896-1905 it gained 639

II.—MONEY IN CIRCULATION (EXCLUDING TREASURY), 1860-1905.

Year.	Gold.	Silver.	United States notes.	Bank-notes.	Miscellaneous.	Total.
1860	$228,314,000		...	...	$207,102,000	$435,407,000
1865	25,000,000		$378,916,000	$146,138,000	164,648,000	714,703,000
1878	25,000,000	55,127,000	320,906,000	311,724,000	16,367,000	729,132,000
1890						
Coin . . .	374,259,000	110,311,000	334,689,000	181,605,000	...	1429,251,000
Certificates .	130,830,000	297,556,000				
1896						
Coin . . .	454,905,000	112,321,000	224,250,000	215,168,000	126,935,000	1506,435,000
Certificates .	42,198,000	330,657,000				
1900						
Coin . . .	610,806,000	142,050,000	313,971,000	237,805,000	79,009,000	2055,151,000
Certificates .	200,733,000	408,465,000				
1905						
Coin . . .	651,063,000	175,022,000	332,420,000	480,029,000	9,272,000	2587,882,000
Certificates .	485,210,000	454,864,000				
Increase— 1890-1905	631,184,000	222,019,000	2,269,000*	298,424,000	9,272,000	1158,631,000
Increase— 1896-1905	639,170,000	186,918,000	108,170,000	264,861,000	117,663,000*	1081,447,000

* Decrease.

million dollars against 265 millions of national bank-notes, 187 millions of silver, and 108 millions of United States notes (greenbacks). The whole volume of money increased during that period by 1081 million dollars, of which 64 per cent was gold or gold certificates, 26 per cent national bank-notes, 19 per cent silver or silver certificates, and 10 per cent United States notes. To those who consider the currency dangerously inflated, it should be a consolation to observe that its quality at least is improving. Had the principal growth been in the legal tender notes or the national bank-notes, there would have been much greater cause for uneasiness than in the steady growth of the stock of gold.

Table III. (p. 130) carries our analysis a step farther, and shows who are the actual holders of the three thousand million dollars of currency. There are, it will be seen, three distinct sets of currency holders,—the Treasury, the banks, and the public. These holdings differ so widely in their character and the conditions under which they operate as almost to constitute different classes of currency. The use that the Treasury and Sub-Treasuries make of their cash in hand differs from the use that the banks make of theirs, and the latter differs still more from the use made by the public of the money in actual circulation. The only money doing its duty fully and efficiently is the 1000 million dollars in the hands of the

III.—Distribution of United States Money, 1892-1905.

Year.	Total money in United States.	In Treasury.*	In "reporting banks."	In hands of the public.	Percentage in		
					Treasury.	Banks.	Public.
1892	$1752,200,000	$150,900,000	$586,400,000	$1014,900,000	$8.60	$33·48	$57·92
1893	1738,800,000	142,100,000	515,900,000	1080,800,000	8·17	29·68	62·15
1896	1799,900,000	293,500,000	531,800,000	974,600,000	16·31	29·55	54·14
1900	2339,700,000	284,600,000	749,900,000	1305,200,000	12·16	32·05	55·79
1905	2883,100,000	295,200,000	987,800,000	1600,100,000	10·24	34·27	55·49
Increase, 1892-1905	1130,900,000	144,300,000	401,400,000	585,200,000	1·64	0·79	2·43†
Per cent .	65·0	95·6	68·5	57·7	...	...	...
Increase, 1896-1905	1083,200,000	1,700,000	456,000,000	625,500,000	6·07†	4·72	1·35
Per cent .	60·0	0·6	86·0	64·0	...	...	...

* Free assets of Treasury excluding specie held against certificates and Guarantee Fund for United States notes. † Decrease.

people. It is genuine currency, while the 987 million dollars in the banks is partly "till money," and partly cash reserves which the law requires to be held against deposits. The 295 million dollars in the Treasury and Sub-Treasuries is also "till money" and cash reserves combined.

Between them the Treasury and the "reporting banks" hold 44½ per cent of the entire currency, and if we add a fair allowance for the thousands of private banks not reporting to the Comptroller of the Currency, the 44½ per cent may easily run up to 50 per cent. Less than one-half of the official circulation really circulates. The proportion worked out in Table III. is 55·49 per cent, but that no doubt includes large amounts held by "non-reporting" banks. When these and a few other necessary qualifications have been made, the three billion currency will look much less imposing than it did at first glance. One-half of it is practically dormant, being held by the Treasury and the banks for objects which are only quasi-monetary.

Thus the changes in the total volume of money may have greater or less importance according to the particular class of money most affected by them. An increase or a decrease of the Treasury holding may not matter much. A corresponding change in the money held by the banks will mean a great deal more. The most significant of all is an increase or a decrease in the volume of money in the hands of the people. Of the 1083 million

dollar increase that was recorded between 1896 and 1905, less than 1 per cent occurred in the Treasury holding. Two-fifths of it appears as bank money, but the other three-fifths, equal to 625 million dollars, got into general circulation.

The ratios given for five special years in the past decade, namely, 1892, 1893, 1896, 1900, and 1905, show that the Treasury holdings (free assets) ranged from 8·17 per cent up to 16·31 per cent. The lowest quota held by the banks—national, state, and private—was 29½ per cent, and the highest 34 per cent (1905). The currency in the hands of the public touched its maximum—62·15 per cent of the whole—in 1893, and its minimum, 54·14 per cent, in the following year. Latterly it has been averaging about 55 per cent of the total circulation.

The following table (IV.) shows the variations in the average per head for gold, silver, and paper traced back to 1873. Note here the great advance that has taken place in the averages of both gold and silver, and contrast it with the equally marked fall in paper money. Between 1873 and 1905 the stock of gold rose from $5·23 to $15·9 per head—nearly trebled itself, in fact. In the same period silver rose from 15 cents per head to $8—more than fiftyfold increase. Paper money diminished from $18 per head to under $10 per head.

In most countries such an accumulation of metallic money would have been positively em-

IV.—United States Gold, Silver, and Paper Money per head, 1873-1905.

Year.	Population.	Stock of gold.	Per head.	Stock of silver.	Per head.	Paper money.	Per head.
1873	41,677,000	$135,000,000	$3·23	$6,149,000	$0·15	$749,445,000	$18·0
1878	47,598,000	213,200,000	4·47	88,048,000	1·85	687,743,000	14·4
1890	62,622,000	695,568,000	11·10	463,212,000	7·39	532,651,000	8·5
1896	71,390,000	599,598,000	8·40	628,728,000	8·81	702,365,000	9·8
1900	76,891,000	1034,439,000	13·45	647,371,000	8·42	732,348,000	9·5
1905	83,143,000	1325,076,000	15·9	663,239,000	8·0	815,814,000	9·8

The above averages per head for gold and silver are obtained from the Reports of the Director of the Mint. The following, taken from the 'Statistical Abstract of the United States,' are somewhat different :—

	1873.	1878.	1890.	1896.	1900.	1905.
Stock of money per head . .	$18·58	$16·59	$26·91	$25·62	$30·66	$34·68
Circulation per head . . .	18·04	15·32	22·82	21·41	26·94	31·08

barrassing. In the United Kingdom we should not have known what to do with it. The vaults of the Bank of England would have been bursting with gold, and the gold reserve in the banking department would have gone up to 70 or 80 per cent of the total liabilities.

London has to maintain its claim to be the monetary centre of the world with a mere fraction of the gold owned by the United States. Our average per head for the whole country is only $12·26 against the American $15·9 per head. Only two countries have a larger individual average than the United States—namely, France $23·75 and Australia $22·56 per head. France has also rather more silver—$10·54 against $8 per head. But she has a comparatively small amount of uncovered paper—only $2·84 against the American $9·8 per head. Australia has no uncovered paper, her bank-notes being all convertible into gold on demand.

With existing materials the United States could have any kind of currency it likes—gold, silver, or paper. The mere currency part of the problem is comparatively simple. What is difficult is the entanglement which the currency has got into with the Treasury on one hand and the banks on the other. The latter have in their own department done almost as much harm to the cause of sound money as the free silver men. They have been equally eager to get control of the currency and to regulate it in their own in-

terests. What they mean by elastic currency is, in fact, a currency with unlimited power of expansion, on the strength of which they could go on increasing their loans *ad infinitum.* They would readily dispense with any power of contraction.

On one point the banks are perfectly right. The currency, huge as it is, does not keep pace with the rapid expansion of their banking operations. It would be difficult to imagine a currency capable of such a feat. In the forty years 1865-1905 the total volume of United States money increased 275 per cent. That sounds large, but it was much too slow for banks which in the same period increased their deposits 1670 per cent and their loans 2390 per cent. In the past decade (1896-1905) bank deposits and loans grew at double the rate which the currency could achieve with all the facilities and encouragements given to it. The respective rates of increase in the ten years were—deposits 130 per cent, loans 110 per cent, currency 60 per cent. Other comparisons almost as interesting will be found in the earlier periods set out in Table V. (p. 136).

The last two columns of Table V. exhibit rather interesting relations between the volume of the currency at a given date and the corresponding amounts of bank deposits and loans. So rapid has been the growth of the deposits, that while in 1865 the currency exceeded them by 20 per cent, in 1905 they exceeded it by 75 per cent. The loans during the same period have still

V.—BANK DEPOSITS, LOANS, AND CURRENCY, 1865-1905.

	Bank deposits.	Increase per cent.	Bank loans.	Increase per cent.	Total currency.	Increase per cent.	Percentage of currency.	
							To deposits.	To loans.
1865	$641,000,000	...	$362,400,000	...	$770,129,000	...	120·0	212·5
1878	1,717,400,000	168·0	1561,200,000	333·8	789,790,000	2·5	46·0	56·0
1890	4.062,500,000	136·5	3842,100,000	146·0	1685,123,000	113·0	41·5	43·9
1896	4,945,100,000	21·7	4251,100,000	10·6	1799,975,000	7·0	36·4	42·3
1900	7,238,900,000	46·0	5657,500,000	33·0	2339,700,000	30·0	32·3	41·4
1905	11,350,700,000	57·0	9027,200,000	60·0	2883,109,000	23·2	25·4	31·8
Increase, 1865-1905	10,709,700,000	1670	8664,800,000	2390	2113,980,000	275	...	...
1896-1905	6,405,600,000	130	4776,100,000	110	1083,134,000	60	...	...

further overshadowed the currency. In 1865 currency was 212·5 per cent of loans, but in 1905 it had fallen to 31·8 per cent of them.

In Table VI. (p. 138) this comparison is extended to bank clearings, and with very similar results to those furnished by the deposits and loans. Between 1896 and 1905 the increase of clearings was 170·5 per cent and that of the currency only 60 per cent. The ratios of currency to clearings in each of the six typical years under comparison show great irregularity. They began in 1865 at 1 in 34, and rose, in 1878, to 1 in 28·5. In 1890 they fell again to 1 in 35, but rose once more, in 1896, to 1 in 28·8 After 1896 the ratio of currency to bank clearings fell heavily. In 1900 it was 1 in 36, and in 1905 it was only 1 in 48·7. In other words, the bank clearings were more than 48 times as large as the total volume of currency at the same date.

The foreign trade of a country is one of the standards by which we might naturally try to measure its currency requirements. In this case, however, there is no trace of parallel action, or even of sympathetic movement. Between 1865 and 1878, when the foreign trade of the United States underwent a phenomenal expansion, imports having increased 83 per cent and exports 319 per cent, the currency was stationary, having made a nominal gain of only 2½ per cent. Conversely, between 1878 and 1890, the free silver period, currency gained 113 per cent against

VI.—UNITED STATES BANK CLEARINGS AND CURRENCY, 1865-1905.

	Bank clearings.	Increase per cent.	Currency.	Increase per cent.	Ratio of currency to clearings.
1865	$26,032,384,000*	...	$770,129,000	...	1 in 34
1878	22,508,438,000*	...	789,790,000	2·5	1 " 28·5
1890	58,845,279,000	...	1685,123,000	113·0	1 " 35
1896	51,935,651,000	11·8†	1799,975,000	7·0	1 " 28·8
1900	84,582,450,000	62·8	2339,700,000	30·0	1 " 36
1905	140,501,841,000	66·0	2883,109,000	23·2	1 " 48·7
Increase, 1896-1905	88,566,190	170·5	1083,134,000	60·0	

* New York clearings only. † Decrease.

80 per cent in imports and only 23 per cent in exports,—see Table VII. (p. 140).

It is as difficult to trace any correspondence here between the volume of the currency and the fluctuations of exports and imports as between it and the bank clearings, or the bank deposits, or the bank loans, or the railroad traffics, or the output of the staple industries of the country. The currency seems to have an orbit of its own which seldom intersects any of the other financial or commercial orbits. Huge as it is, they, in their several spheres, are larger still, and their relations to each other have very little visible method in them.

The student of United States currency is liable at every turn to be overwhelmed by its magnitude, and at the same time bewildered by its variety. It is an immense machine, made up of a great diversity of wheels, designed by different artists at different times and with different objects. Not only do the wheels work badly together, but they have a poor opinion of each other, and all the time they carry on a more or less heated recrimination. The gold wheel looks down scornfully on the silver and paper wheels, which retort on it that it is merely for show and not for work.

To add to the confusion, the various parts of this gigantic currency machine have each vehement partisans, not in theory only, but in practice as well. Currency schools are as numerous in the

VII.—UNITED STATES IMPORTS, EXPORTS, AND CURRENCY, 1865-1905.

Year.	Imports.	Increase per cent.	Exports.	Increase per cent.	Currency.	Increase per cent.
1865	$238,745,000	...	$166,029,000	...	$770,129,000	...
1878	437,051,000	83·0	694,865,000	319·0	789,790,000	2·5
1890	789,310,000	80·6	857,828,000	23·0	1685,123,000	113·0
1896	779,724,000	1·2*	882,606,000	2·9	1799,975,000	7·0
1900	849,941,000	9·0	1394,483,000	58·0	2339,700,000	30·0
1905	1117,513,000	31·5	1518,561,000	8·1	2883,109,000	23·2
Increase—1865-1905	878,768,000	370	1352,462,000	815	2113,980,000	275
1896-1905	337,789,000	43	635,955,000	72	1083,134,000	60

* Decrease.

United States now as they were in England two generations ago, when the Bank Act of 1844 was being licked into shape. There is the Indianapolis School which will have nothing but gold, the Bryan School which still denounces "the great betrayal" of silver in 1873, and the Wall Street School which demands "assets currency" *ad libitum.* The currency reformers are indeed at sixes and sevens among themselves. One eminent financier has predicted a catastrophe without parallel if it is allowed to go much longer unreformed. Other financiers would alter so many different parts of it, that when they were all finished there might be little currency left. One set would withdraw the legal tender notes, another would demonetise all the silver left in the Treasury, another would change the basis of the bank-notes, while still another would like to make a clean sweep of the whole three billion dollars and begin again with a clean slate.

Long and close study of this overgrown currency inclined us to steer a middle course between the optimists and the pessimists. The latter have no doubt a long catalogue of defects and drawbacks to harp on, but when all these have been admitted, a substantial amount of indisputable good remains. A currency composed of two-thirds gold and silver and one-third national credit, the best in Christendom, cannot be wholly unsafe or unsound. It may be clumsy in its movements and liable to abuse by men who know

how to exploit it for speculative objects, but there are few currencies free from these evils. The Scotch and the Canadian systems are the only two that have so far escaped them.

The real vice of the three billion currency is its unwieldy bulk. This strikes one at first sight, and the more we see of it the more it impresses us. The first and last criticism it provokes is amazement at the quantity of it. Its materials are all the best of their kind, and the only question is if quite as good results might not be achieved with smaller quantities of them. Currency can be economised as well as food or any other commodity. But this is the last lesson in monetary science that the Americans are ever likely to learn, much less to practise.

BOOK II.—ITS ORGANISATION.

CHAPTER VII.

ITS NINE HUNDRED MILLION PAPER DOLLARS.

CURRENCY is one of the subjects which are more easily managed by a monarchy acting under an unwritten constitution than by a republic with a written constitution. English currency has from first to last been a matter of business. It has been wonderfully fortunate in escaping legal and political complications. True, it has undergone many vicissitudes, and been subjected to many severe strains both in peace and in war. But on the whole its evolution has pursued an exceptionally straight and natural course. We may speak of it as one of the most logical or least illogical factors in our national organisation. From metallic money it rose to goldsmiths' receipts, from these to bank bills, from bank bills with a fixed term to bills payable on demand, which became the bank-notes of our own day. Our currency and our banking systems have grown up side by side, and, without being absolutely consistent or scientific, they have worked fairly well together.

In some of these respects the currency of the United States has been the antithesis of our own. It has never had a chance to develop naturally, and to adapt itself in its own way to its proper work. In all the hundred and thirty years of its history it has never been long free from the interference of lawyers and politicians. Congress has done more currency discussion in a single session than the British Hansard records in half a century. The Supreme Court of the United States has again and again had to decide fine points of currency law which have not only never occurred in England but have hardly ever been heard of. For the latest opinions on such intricate and difficult questions we must go to American jurists.

In the New World they have a pretty gift of metaphor. Instead of speaking of alcoholic and temperance beverages, they say "hard and soft drinks," which, it must be admitted, is much more expressive. When their currency was about as bewildering as their drinks, they used to talk of "hard and soft" money, meaning thereby metallic money and paper. They have had a long and varied experience of both sorts. Of the two their soft money is the more interesting, and when we get into the history of it we cease to wonder at their historical affection for it.

It might have been pleasanter for the Americans to avoid all these pitfalls and difficulties as we have done; but the experience derived from them is a considerable asset on the other side. If not

altogether worth the heavy price that has been paid for it, the Americans of to-day would have been poorer and less capable men without it. There is a certain irony, however, in the fact that the constitution of the United States has been one of the chief sources of currency trouble. The original draft of that document contained five harmless-looking words which have proved a veritable Pandora's box of legislative and judicial discord. Though in the revision of the draft by the Federal Convention they were struck out, they have, like Banquo's ghost, jumped up again and again. The five words are italicised in the following sentence—"The Legislature of the United States shall have power to borrow money and *emit bills on the credit* of the United States."

These five words—"emit bills on the credit," or, in the shortened form they subsequently assumed, "emit bills of credit," have had a most prejudicial influence on the history of American currency. Though, of course, greatly weakened by lapse of time, that influence is still far from being dead. There is much in the currency conditions of the present day which cannot be fully appreciated unless in the light of the old and forgotten discussions which raged around it. Because of what happened during the war of the revolution certain action relating to currency had to be taken by the Federal Convention of 1787. Because of 1787 similar action had to be taken during the war of 1812, during the financial crisis

of 1837, during the Civil War, and during all the financial crises that have followed.

Not only were the events that attended the birth of the Republic strong enough to mould later generations even against their will, but the men of that period were also in many ways irresistible. Currency and finance were vital issues with the founders of the Republic, and issues unfortunately on which they could not agree. They differed not only radically but vehemently, strenuously, and uncompromisingly. The early records of Congress bristle with currency polemics—political all of it. In the first seventy or eighty years of the Union there were more monetary experiments made under it than any other people had ever gone through before. There were more currency theories propounded, more constitutional questions raised, more hairsplitting indulged in, than any other country could have survived. And the printing-press turned out a greater variety of paper money than may be found in any other equal period of the world's history.

Nor were these all wild haphazard adventures, as we have witnessed in our own day in the South American republics. A large majority of the men engaged in them were honestly striving after sound money. Many of them knew well what sound money was, and how it was to be secured. Alexander Hamilton, Madison, Benton, Calhoun, and Daniel Webster were all ultra orthodox on currency. Some of them were

quite punctilious in their interpretation of the monetary powers of Congress. Often the very excess of their orthodoxy did harm by provoking successful resistance and reaction. They were always on the watch for their special bogey, "bills of credit," which had so nearly crept into the text of the constitution. In order to appreciate the intensity of their antagonism to it, we must understand the technical meaning which the phrase, "emit bills of credit," had acquired in early American politics.

The phrase itself had been inherited from the New England colonies, where "bills of credit" formed a large but illegitimate portion of the domestic circulation. Evidently they were so called to distinguish them from bills of exchange, from which they differed in several essential points. The bill of exchange was a specific document arising out of a specific transaction which it both opened and closed. Incidentally it might be used as currency, but that was not one of its contemplated objects. The New England "bill of credit" was not a specific document, but part of a wholesale issue. It did not arise out of a specific transaction, but was issued in advance for promiscuous use in settling future transactions. Its real purpose was to circulate as money, and millions of dollars did so circulate in the colonies for nearly a century—namely, from their first issue in Massachusetts in 1690 down to within a few years of the revolu-

tion. They were issued by the colonial treasuries at first for military expeditions and other emergencies, but latterly for general purposes.

Sometimes these "bills of credit" were made legal tender, and as such they were foisted on English merchants in payment of imports. This brought down the Home Government on them. Colonial governors were instructed to issue special proclamations against them, which they did as a rule in very vigorous terms. Governor Belcher of Massachusetts denounced them as "bills or notes which promise nothing of any determinate value, and cannot have any general, certain, or established credit." He threatened to dismiss any officer of the militia who directly or indirectly gave any countenance "to the passing of the said notes of hand." But proclamations availed little against them, and at last Parliament intervened. In 1740 the Bubble Act was extended to the colonies, and in 1757 colonial paper money was restricted to the amount needed for the current expenses of administration year by year. No extra issue might be made unless in case of invasion.

The colonists, or "provincials" as they were called, resented this interference with their local currency. It became, in fact, one of their long catalogue of grievances against the Home Government. When the quarrel came to a head, what could be more natural and appropriate than that they should fight the British with anti-British

money? It was hardly a matter of choice with them, for they had little money of any other kind. The total amount of specie in the thirteen states on the eve of the revolution was at the highest estimate under ten million dollars. When the Massachusetts Assembly met at Salem (June 1774) after the battle of Lexington, it appointed a Committee of Safety and a committee for warlike stores. The latter was voted ninety thousand dollars for a war-chest; and the sum was judiciously expended on "ordnance" together with 350 spades and pickaxes, 1000 wooden mess-bowls, and some pease and flour. Never was a great war begun on such a modest financial basis.

In the following autumn delegates from all the thirteen states met at Philadelphia and formed themselves into the first Continental Congress. Being merely delegates without either legislative or executive power, they could only make proposals to the states, which had to be left to them to carry out or not as they pleased. One of these was an issue of credit notes, which were assigned to the various states in certain proportions. They were to pay them out for military expenses, become responsible for them, and arrange for their redemption by annual instalments, commencing in 1779. The Continental Congress lived for half a dozen years on successive issues of this paper money, the most ephemeral ever created. It never saw hard cash except in the form of occasional loans raised at Philadelphia

or in Europe. In 1778, when the war was at its height, all the metallic money used during the year's campaign might, it was said, have been carried in a wheelbarrow. All the rest was "continental" money, printed as required.

How many Americans who express contempt by saying that "they don't care a continental" have the slighest idea of the original meaning of that favourite bit of slang? Meaningless as it sounds, there is a certain amount of historical dignity attaching to it. One of the most remarkable paper moneys that the world ever saw was popularly known in its brief day as "continental." It was so called from its authors the "Continental Congress," which financed with it the greater part of the War of Independence. It did for Washington and the leaders of the revolution what the "greenbacks" did eighty years later for the Federals in the Civil War. Both were ruinously wasteful, but they served their purpose. In their subsequent history, however, they differed widely. The "continental" paper was got rid of as soon as possible, and its whole life did not much exceed six years. But a large portion of the "greenbacks" survive to the present day, and defy the efforts of the most powerful banking and financial interests in the country to get them cancelled.

The records of the revolution teem with allusions to "continental" or "Congress" money as it was indifferently called. It also figures

frequently in fiction dealing with that stormy period. Mr Winston Churchill, in his novel 'The Crossing,' adds zest to the brilliant adventures of Colonel Clark and his other heroes by alluding now and then to their monetary difficulties. It was much easier for them to capture towns than to get the townspeople to cash their notes. When Colonel Clark, the commander-in-chief of the Kentucky militia, planned his campaign against the British and French settlements in Illinois, he had first to go to Williamsburg to obtain the sanction and aid of the Virginia legislature. "Virginia had no troops to send us," he said, "and her men were fighting barefoot with Washington against the armies of the British king. But the governor gave me twelve hundred pounds in paper, and with it I have raised the little force that we have here."

The first issue of "continental" bills, though dated May 1775, did not get into circulation until August following. From that date up to the end of 1776, only about 20 million dollars of them could be turned out. Next year the output was still comparatively small, having scarcely reached 26½ million dollars. But from 1778 onward the supply became liberal. In that year it amounted to nearly 67 million dollars, and in 1779 it rose to high-water mark with a total of close up to 150 million dollars. As the war drew to a close the demand for "continentals" fell off, or it might

be more correctly said that the country was so saturated with them as to be unable to absorb any more. In 1780 the addition made to them was only 83 million dollars, and in 1781 it fell to 12½ millions, including fully one million dollars of a new issue more attractive than the original. The total issue from 1775 to 1781 was a little under 360 million dollars,—more than ten times as much as would have served the purpose had it been properly regulated.

A more ironical commentary on the folly of unlimited and unrestricted paper money there could hardly be than the rapidity with which "continentals" depreciated as the process of over saturation went on. As was observed more than a century later in the case of English bank-notes after the suspension of specie payments, they held their metallic value up to a certain point. According to President Jefferson they did not fall much below par—in other words, below standard silver—until the issues passed 9 million dollars. In 1778, when the amount in circulation had risen to 50 millions, 3 paper dollars had to be given for one silver dollar. In 1779, when their average volume was over 150 millions, they fell to 45 paper dollars for one silver dollar. At the end of 1780, when the whole country had been deluged with them, the ratio of paper to silver became 100 to 1.

In May 1781 they had fallen into such discredit that unfortunate holders willingly gave

500 of them for a hard dollar. This was at the rubbish rate of ten dollars for a penny. The Argentine dollar in its worst days could always command ninepence or tenpence in foreign exchange; and even cedula coupons, after being ten years in default, had still a sporting value of a penny to three halfpence per dollar. The manufacture of "continentals" was suspended in 1781, and then they seem to have rallied somewhat. Alexander Hamilton treated them with unexpected liberality in his funding scheme of 1790, which offered one dollar in new Six per cent bonds for every 100 paper dollars. By this time they were so widely scattered and so many hidden away that comparatively few came in. Millions of dollars of them remained in remote districts, and Pelatiah Webster says of this final remnant that "it expired without a groan or a struggle." The last business recorded in them was at a thousand to one in silver dollars,—the very lowest price we should think that a national currency ever touched. Even more could be got to-day for Confederate bonds. Among the paradoxes of popular currency there is nothing so astounding as the ease with which this three hundred and sixty million dollars of "wild-cat" paper was issued, except it be the coolness with which the issuers left it to its fate, and the philosophic resignation with which the holders bore their loss. Years after it had gone out of use, bundles of it would be found in old chests.

Sometimes they would be taken to the market-place and publicly burned.

Each of the thirteen states also manufactured "bills of credit" on its own account, and the aggregate of their issues was estimated afterwards at 200 million dollars. The net loss to the people on the 260 million dollars of "continental" money has been calculated at 196 million dollars. Thus far the founders of the American republic "bills of credit" had a doubly sinister history. One of their sternest resolves at the close of the war was to be done with such things for ever. They took every imaginable precaution against a revival of them. We have seen how the very name of them was excluded from the constitution of 1789. For years after a word in their favour would provoke an explosion among the sound money men, either in the Senate or the House. Nevertheless, by some strange irony of fate this bogey of colonial governors, of the Continental Congress, and of the framers of the constitution, was destined to continue for more than a century a dominant factor in American currency. Again and again the evil spirit was exorcised but not killed, and it cannot even now be said to be buried beyond fear of resurrection.

Not only did the fathers of the Republic do their utmost to protect it against paper money, but their successors for many years honestly tried to fulfil the trust handed down to them. It was not their fault if events proved too strong for

them. Let us give them credit for the fourteen years, from 1789 to 1813, during which they kept the Republic on a metallic basis. A second war then called for war measures, and "bills of credit" had to be once more resorted to. But a much safer and more solid type of them was now devised than that of the Continental Congress. When this emergency had passed, the Treasury notes created to meet it were duly funded, and in course of time redeemed.

The paper money bogey did not reappear till the financial crisis of 1837—another emergency which demanded exceptional currency. Though severe and widespread it was gradually overcome, and there were no more "bills of credit" till 1857, when a third war had to be financed—that with Mexico. The Mexican war series had hardly been got rid of, when the last and heaviest of all calls on the credit of the Republic had to be faced. The "greenbacks" of the Civil War stand out above all previous issues, not only in their magnitude, but in the momentous character of the cause they had to serve. Nevertheless, they were only "bills of credit," differing merely in form from their many and varied predecessors.

Whatever differences there may have been among them in details, all the issues of Treasury paper, from 1775 down to 1865, were alike in principle. The whole of them fell under Chief-Justice Marshall's famous definition of bills of credit as "paper issued by the sovereign authority,

and intended to circulate as money." This is not only a legal definition of them, but it suggests their most radical defects. And the latter furnish us with a key to the characteristic peculiarities of United States currency. The most striking of these, from an English standpoint, are the large share of the paper money of the country that has been directly created by the Government at its own risk and on its own responsibility; the great diversity and lack of principle there has been in such creations, due, no doubt, to their having been imperatively called for by national emergencies; the abrupt intrusions of the Government into the business of providing paper currency, and its equally abrupt withdrawals; the rapid and bewildering changes thereby caused from one form of paper money to another; the absence of systematic co-operation between the Government and other legalised purveyors of paper money; the often disastrous rivalry that has obtained between the national Treasury and the note-issuing banks; the strong jealousy which still exists between the banks and the Treasury, both in their banking and their currency operations; worst of all, the chaos of note issues to which the Treasury and various sets of independent issuers unceasingly contribute.

The practical effect of all these rivalries and overlappings is bad, and could not fail to be so. The American people are so confused with their medley of heterogeneous dollars that they have

given up trying to distinguish one from the other, either as regards quantity or quality. They know from the statistics with which they are abundantly supplied by the Comptroller of Currency that they possess much more than the average amount per head of paper money as well as a higher average per head of metallic money than most countries. But whether their total volume of currency bears any rational proportion to the work it has to do; whether it is inadequate, or in excess, or just the right amount; whether they could with advantage use more of it or do better with less of it,—these are questions still hovering in mid-air.

"Bills of credit," if not so terrible a bogey as they were to the founders of the Republic, are now much more varied and perplexing. Formerly Congress had to struggle with only one kind of them at a time, and it is significant that the same sort seldom received a second trial. The ingenuity of the Treasury and of Committees of Ways and Means in devising new styles of paper money was quite inexhaustible. It reached its climax during the Civil War, and has since been inclined to moderate its prolific zeal. The tendency is now toward simplification, but it may take a long time to reduce all the piebald dollars still in circulation to one or two uniform types.

The above outline of the antecedents of United States paper money shows that during the greater

part of its history it has been in a state of abnormal inflation. Short periods of normal supply are interspersed with long periods of over-supply. Among the latter are at least two periods of phenomenal excess. A country which has undergone even one such orgy of inflation cannot be expected to return quickly to safe and moderate limits. It may be doubted if American currency has yet reached that stage of recovery from the free silver mania produced by the Bland and Sherman laws. Though the piles of useless silver with which these laws filled the Treasury vaults have, so to speak, been neutralised, the ultimate question of a scientifically safe and sufficient currency has not yet been faced either by Congress or by the people themselves.

Thanks to their prolonged and tolerant experience of "bills of credit," the Americans have been at all times much more familiar with currency inflation than European states generally are. They have seldom known what it is to have an adequate currency and no more. They are generally at one extreme or the other,—glut or famine,—and much oftener glut than famine. This circumstance may explain the comparative neglect they have shown to one important aspect of the currency problem,—the most important, in fact, that remains to be investigated. We refer to the relation between the volume of currency and the work—commercial and financial—which it may have to do. This point has nowhere received

the attention it deserves, and least of all in the United States. That it should have been overlooked by the people who take the greatest scientific as well as practical interest in currency questions is somewhat remarkable.

Why is it that the homely maxim "enough is as good as a feast" should be applied to every kind of business except currency? It is intelligible that mankind should think it impossible to have too much gold and silver, but these metals are coveted for their own sake rather than for their monetary powers. But it is in the last degree paradoxical that paper money should be coveted for its own sake, and not by individuals only but by whole nations. Above all, it is inconceivable how such a craze should be found at its very worst among some of the most intelligent level-headed people in the world. The Americans had bad attacks of it in their early days, and it has still millions of dupes west of the Mississippi.

We have only to get down to the elementary principles of paper money in order to see how misleading this fallacy is. Let us recall the historical fact that the earliest, and in this respect the best, type of paper money—the bill of exchange—was invented to eke out inadequate supplies of metallic money. It economised gold and silver in two ways,—first, by lessening the necessity to transport them from one place to another; and secondly, by circulating from hand to hand as money. The original bill of exchange,

given in payment of goods or securities, had the goods or securities behind it. The amount of *bonâ fide* bills in circulation at a given time could not exceed the value of the property transferred by them from sellers to buyers. There was consequently little danger of their being in excess. While it remained a purely commercial document the bill of exchange was a self-adjusting currency. But into its modern offshoots the element of credit insinuated itself more and more, until it completely overshadowed the commercial element. And the larger the proportion of credit, the more difficult it became to adjust the volume of paper to the work required of it.

The first variation of the original bill of exchange was the goldsmith's promissory note, which had a sort of lien over his deposits. The next advance was the promissory note of the Bank of England, which under its charter was made transferable by endorsement. The note payable to bearer on demand, which is now the bank-note of English commerce, was a much later device. At each successive step in this evolution the facilities of manufacture become larger and the checks on over-supply become weaker. A currency of goldsmiths' bills would be more elastic than one of bills of exchange only. A currency of Bank of England bills would be still more expansive, and the effect of this was soon seen in the fillip they gave to speculation which ended in the South Sea Bubble.

This was a clear case of over-supply of paper money. No one thought of adjusting the issue of such bills to the *bonâ fide* commercial and financial needs they professed to serve. The chief thought of their issuers was to get them into circulation. When transferable notes were superseded by notes to bearer payable on demand, the volume and the area of circulation were both vastly enlarged. In a corresponding degree it became more difficult to gauge their sufficiency or otherwise. During the twenty years, from 1797 to 1817, when the check of specie payments was suspended, English bank-notes were in practically unlimited supply. The English idea of that day was very much akin to the Western idea of to-day, that abundance of paper money is desirable for its own sake, however much it may exceed the volume of business to be done. A large proportion of the town issues and a still larger proportion of the country issues were, in fact, not currency but artificial creations of banking capital.

Thanks to the limitation of uncovered paper issues by the Bank Act of 1844, the line is now pretty clearly drawn in England between currency proper and currency which is only a fictitious kind of capital. It is not excess of paper money that has to be feared on this side of the Atlantic. Our chief trouble arises from the international scramble for gold, in which the Americans take a leading part. On the

other hand, what they have most to fear is the multiplication of paper money for other than monetary uses. Of all civilised countries, the United States has been least careful to confine its currency to the proper business of a circulating medium pure and simple. Bastard functions, devised by political and other schemers for special ends, have been grafted on its legitimate functions. More especially has it been made to serve the mistaken object of rendering money plentiful.

That is the distinctive vice of the "bill of credit" policy. The New England colonists frankly admitted it in their case. Nowadays if it is not acknowledged by cheap money senators and lobbyists it is equally well understood. Currency is desired for its own sake not merely by populist stump orators but by business men, bankers, and Wall Street operators. This significant fact may furnish a clue not only to the exceptional volume and variety of American currency, but also to some sinister peculiarities in American finance. In all civilised nations currency is closely interwoven with banking operations, but in the United States banking is only one of the channels in which its influence is directly and powerfully exercised. It stands in close alliance with the most gigantic speculation. It is the tool of trusts and financial combinations which one day may be strong enough to defy Congress itself. It has been an agent of no small

importance in the creation of multi-millionaires and monopolists.

That currency can be and has been created in the United States for the artificial stimulation of business will hardly be denied. It is demonstrated that the principal increases of late years have been in paper currency, especially in national bank-notes. The subjoined table shows that between the 1st November 1903 and the 1st January 1906 no less than 244 million dollars of new money was put in circulation. Rather less than one-half of the increase was in gold ($110,000,000), and the other half ($119,000,000) was in national bank-notes:—

GOLD, SILVER, AND PAPER CIRCULATION IN THE UNITED STATES, 1903-1904-1906.

	1st November 1903.	1st November 1904.	1st January 1906.
Gold coin . . .	$621,753,297	$641,793,093	$654,168,025
Standard silver dollars .	78,916,739	79,443,123	83,736,227
Subsidiary silver . .	96,235,458	100,408,128	110,029,365
Gold certificates . .	401,646,299	490,193,759	480,939,019
Silver certificates . .	462,363,039	472,713,832	463,960,485
Treasury notes, 1890 .	16,780,175	11,551,887	8,274,884
United States notes .	340,961,343	342,132,421	343,262,091
National bank-notes .	408,738,518	445,240,418	527,173,475
	$2427,394,868	$2583,476,661	$2671,543,571

When millionaire bankers call for a more "elastic" currency they can, as the above table proves, mean only one thing. There are but two of these eight kinds of money that have

any elasticity — gold and national bank-notes. The millionaire bankers can get as much gold as they want in the open market. No fresh legislation is needed to increase its supply. It must therefore be an "elastic" national bank-note they pine for. Unfortunately that is the kind of money the Americans should be most shy of. It is to be their special currency trouble in the near future.

BOOK II.—ITS ORGANISATION.

CHAPTER VIII.

ITS TWO THOUSAND MILLION "HARD" DOLLARS.

SINCE the gold standard was formally adopted by the United States in 1873, it has never been endangered by natural but only by artificial causes. The usual difficulty with most countries in maintaining a gold standard has been scarcity of gold. Some countries are not rich enough to afford it, and others, which have not the excuse of poverty to plead, can neither get enough of it nor retain what they have. The United States no longer labours under either of these disadvantages. Ever since it resumed specie payments in 1879, it has accumulated both gold and silver almost without an effort. Only for a brief period of three years, between the panic of 1893 and the revival of 1896, was there a real gold crisis. Even then the estimated stock of gold in the country never fell much short of nine dollars per head. Only about half a dozen nations in the world have at the present moment (1906) a higher average per head of gold than the United States

possessed in 1895, when the suspension of specie payments was a daily dread. Canada still continues to get along with the same nine dollars per head of gold that so nearly failed to preserve the national solvency of her powerful neighbour.

It looks now almost absurd that there should have been so much alarm as to the stability of a gold standard, which only once had less than 600 million dollars of solid gold behind it. What if it had got muddled up in Congress with over 600 million dollars of silver? A little patience and skilful management could straighten out that tangle, and they have actually done it. The silver scare of 1895 is as dead as Queen Anne, and would be as difficult to revive in the United States as in any part of Europe. Scarcity of metallic money, whether gold or silver, has ceased to be an American bogey. Plethora is to be the future danger, and if it were not disguised for the moment by abnormal demands originating in Wall Street, it would already be making itself felt.

At the end of 1895 the stock of gold in the United States was estimated at 636 million dollars, and of silver at 626 millions. Gold passed the billion dollar mark in 1900, when the total stock was returned at 1034 million dollars. Silver had meanwhile remained stationary, its aggregate at the end of 1900 having been 647 million dollars. In the first five years of the new century gold gained a further 300 million dollars, making a total stock of 1325 millions.

Meanwhile, silver, instead of going utterly to the bad as pessimists had predicted, surprised even its friends by making a strong rally. In the past two years there has been such a revival in the demand for it as to raise the price nearly 50 per cent above the lowest point touched. The 663 million dollars of silver money owned by the United States at the end of 1905 were consequently worth 200 million dollars more than they had been in 1903.

The Americans have thus, in the natural course of events, and by the simple process of leaving the precious metals alone, found a way of escape from the monetary worries of ten years ago. They have to-day a superabundance of "hard" money — nearly 2000 million dollars — and the proportion of paper money to the whole has fallen so low that it could hardly cause serious trouble even if it were not specially protected. Resting as it does on the highest national credit in the world, that of the United States, it should be as good for all commercial uses as either gold or silver. It is, in fact, so good that it should be able to do quicker and better work than any other existing currency. The craze of the day, however, is not to get quicker work, but more currency. The channels of exchange, instead of being kept clear so that money may flow easily and naturally to wherever it is needed, are clogged with artificial issues which have no real circulating power.

The United States being now on a permanent gold basis, and the great mass of its money consisting of the precious metals, its position in regard to these is of much greater practical interest than any paper money issue it can possibly have to deal with. In relation to both gold and silver it is exceptionally well situated. It produces both metals in large quantities, and it has never much difficulty in supplementing its domestic supplies from abroad when necessary. A positive scarcity of either gold or silver, such as may happen any day in London, is almost impossible in New York. Between home production and importation there is invariably a substantial gain at the end of each year.

In the forty years from the close of the Civil War down to 1905, the total output of gold from United States mines was recorded as 1940 million dollars, equal to 48½ million dollars per annum. During the same period nearly 500 million dollars was imported, making a total supply of 2440 million dollars. The total export was estimated at 970½ million dollars, which, deducted from the combined imports and domestic output, would have left 1470 million dollars. Much to the credit of the statistical branch of the Treasury, that amount tallies fairly well with the estimate of gold now in the country. But the statisticians have not been so fortunate with their silver figures. These show an aggregate output for the period 1865-1905 of 2066 million dollars, and a net loss on

exportation of 702 million dollars. There should consequently be something like 1364 million dollars, or nearly double the amount actually on hand. The unrecorded leakages of silver must consequently have been much larger than the leakages of gold.

It is a mere matter of figures to show how little excuse the United States has for monetary trouble, so far as the precious metals are concerned. The subjoined series of tables throw a striking light on (1) its copious supplies of native gold and silver; (2) its liberal, not to say lavish, rate of coinage; (3) its imports and exports of the precious metals; and (4) its estimated net gain of gold and silver from all sources in the past forty years:—

I.—UNITED STATES GOLD PRODUCED AND COINED, 1893-1905.

	Produced.	Coined.
1893	$35,955,000	$56,997,020
1894	39,500,000	79,546,160
1895	46,610,000	59,616,357
1896	53,088,300	47,053,060
1897	57,363,000	76,028,485
1898	64,463,000	77,985,757
1899	71,053,400	111,344,220
1900	79,171,000	99,272,942
1901	78,666,700	101,735,187
1902	80,000,000	47,184,932
1903	73,591,700	43,683,970
1904	80,464,700	233,402,428
1905	86,337,700	49,638,441
	$846,264,500	$1083,488,959

II.—United States Silver Produced and Coined, 1893-1905.

	Produced.	Coined.
1893	$77,575,757	$8,802,797
1894	64,000,000	9,200,350
1895	72,051,000	5,698,010
1896	71,387,800	23,089,899
1897	69,637,172	18,487,297
1898	70,384,485	23,034,033
1899	70,806,626	26,061,520
1900	74,533,495	36,345,321
1901	71,387,800	30,838,460
1902	71,757,575	30,028,167
1903	70,206,060	19,874,440
1904	74,579,800	15,695,610
1905	76,203,100	6,332,181
	$934,510,670	$253,488,085

III.—United States Gold and Silver Produced and Coined, 1893-1905.

	Produced.	Coined.*
1893	$113,530,757	$66,934,749
1894	103,500,000	89,184,688
1895	118,661,000	66,196,798
1896	124,476,100	70,975,678
1897	127,000,172	96,041,882
1898	134,487,485	102,144,625
1899	141,860,026	139,243,191
1900	153,704,495	137,649,101
1901	150,054,500	134,693,770
1902	151,757,575	79,660,896
1903	143,797,760	65,809,691
1904	155,044,500	250,781,567
1905	152,540,800	58,269,177
	$1770,415,170	$1357,585,813

* Including fractional silver.

From Table I. we learn that the United States is practically a self-supporting country as regards gold coinage. In the thirteen years from 1893 to 1905, it raised from its own mines (with some possible help from Mexico and the Yukon) 846 million dollars of gold. During the same period it coined gold to the aggregate value of 1083 million dollars—only 237 million dollars more than the domestic output. But if we eliminate the exceptional year, 1904, when the coinage ran up to 233 million dollars, or nearly three times the normal average, the coinage will almost exactly balance the home production,—a very comfortable position for a gold standard country to be in.

On turning to the silver table we find a large surplus production. The output aggregated in the thirteen years, 1893-1905 (reckoning silver at coining value), 934 million dollars, while the coinage amounted to only 253 million dollars. Not much more than a fourth of the home product was coined, and the other three-fourths had to be disposed of otherwise. Strictly speaking, the new silver coined was a mere fraction of the product of corresponding years. The large coinages shown in the above table for the years 1896 to 1902 were in fact made from old silver that had accumulated in the Treasury while the Sherman Law of 1890 was in operation. It was practically exhausted in 1904, and the coinage of 1905 showed, it will be seen, a heavy drop

in consequence. Hereafter the United States mints are not likely to be called upon often for other than fractional silver money.

Taking the two precious metals together, as shown in Table III., the home product has considerably exceeded the demand for coinage. Its aggregate of 1770 million dollars in the thirteen years goes against an aggregate coinage of 1357 million dollars. All the metallic money created by the United States during that period was thus covered by the home supply—or at least by its market value,—and fully 300 million dollars remained over. Outside of Mexico, South Africa, and Australia, the United States is in this respect unique. It has not, however, begun yet to realise, or even to suspect, the advantange that its ample domestic supplies of the two monetary metals have been to it. Not its currency alone, but its banking business, and through that its whole industrial and commercial system, have benefited from the continuous yield of its gold and silver mines. If this had been more adequately appreciated in the past, less anxiety would have been felt about the foreign movements of gold and silver.

Table IV. shows that in the past thirteen years (1893-1905) the gold imports and exports have balanced each other to eleven million dollars, or less than a million dollars a-year. The bulk of the gold coinage had consequently to be drawn from the domestic supply. Of silver there was such an abundant home production that little

more than a fourth of it was coined; less than a third of it was exported, and the surplus must have been used commercially or stored as bullion.

IV.—NET IMPORTS AND EXPORTS OF GOLD COMPARED WITH THE HOME PRODUCT, 1893-1905.

	Excess of imports.	Excess of exports.	Home products.
1893	...	$87,506,463	$35,955,000
1894	...	4,528,942	39,500,000
1895	...	30,083,721	46,610,000
1896	...	78,884,882	53,088,300
1897	$44,653,200	...	57,363,000
1898	104,985,283	...	64,463,000
1899	51,432,517	...	71,053,400
1900	...	3,693,575	79,171,000
1901	12,866,010	...	78,666,700
1902	3,452,304	...	80,000,000
1903	...	2,108,568	73,591,700
1904	17,595,382	...	80,464,700
1905	...	38,945,063	86,337,700
	$234,984,696	$245,751,214	$846,264,500

V.—NET IMPORTS AND EXPORTS OF GOLD COMPARED WITH THE COINAGE, 1893-1905.

	Net imports.	Net exports.	Coinage.
1893	...	$87,506,463	$56,997,020
1894	...	4,528,942	79,546,160
1895	...	30,083,721	59,616,357
1896	...	78,884,882	47,053,060
1897	$44,653,200	...	76,028,485
1898	104,985,283	...	77,985,757
1899	51,432,517	...	111,344,220
1900	...	3,693,575	99,272,942
1901	12,866,010	...	101,735,187
1902	3,452,304	...	47,184,932
1903	...	2,108,568	43,683,970
1904	17,595,382	...	233,402,428
1905	...	38,945,063	49,638,441
	$234,984,696	$245,751,214	$1,083,488,959

VI.—TOTAL PRODUCTION, COINAGE, AND EXPORT OF SILVER, 1893-1905.

	Total production.	Coined.	Exported.
1893	$77,575,757	$8,802,797	$17,544,067
1894	64,000,000	9,200,350	37,164,713
1895	72,051,000	5,698,010	27,084,107
1896	71,387,800	23,089,899	31,764,484
1897	69,637,172	18,487,297	31,413,411
1898	70,384,485	23,034,033	24,177,458
1899	70,806,626	26,061,520	25,643,999
1900	74,533,495	36,345,321	21,455,973
1901	71,387,800	30,838,460	27,898,659
1902	71,757,575	30,028,167	21,410,136
1903	70,206,060	19,874,440	20,086,768
1904	74,579,800	15,695,610	21,703,888
1905	76,203,100	6,332,181	21,363,947
	$934,510,670	$253,488,085	$328,711,610

A broader comparison of the home and foreign supplies of metallic money, extending over a period of forty years (1865-1905), places beyond doubt the self-dependent position of the United States under normal conditions. When gold has to be drawn from abroad, it is not, as a rule, for purely monetary reasons or even for commercial needs, but for speculative emergencies.

[TABLE VII.

VII.—FORTY YEARS' ACCUMULATION OF GOLD AND SILVER—1865-1905.

1865-1905.	Excess of imports.	Excess of exports.
Gold	$499,637,000	$970,476,000
Net loss	470,839,000	...
Home production .	1939,969,000	...
Net surplus . . .	$1469,130,000	...
Silver	...	$702,558,000
Home production .	...	2065,971,000
Net surplus . . .	...	$1363,413,000

As a crowning example of the undue importance which is being given nowadays to the precious metals as factors in international banking, let us contrast their net imports and exports with the enormous mass of American currency supposed to be dependent on them. The subjoined table (VIII.) exhibits for selected years—from 1865 to 1905—(1) the excess of imports or exports of gold from the United States; (2) the excess of imports or exports of silver; and (3) the total volume of currency in the United States in the corresponding years:—

VIII.—GOLD AND SILVER MOVEMENTS COMPARED WITH TOTAL CURRENCY.

	Gold.		Silver.	Total currency.
	Excess of exports.	Excess of imports.	Excess of exports.	
1865	$51,882,000	...	$5,950,000	$770,129,000
1878	...	$4,125,700	8,044,000	789,790,000
1890	4,331,000	...	13,841,000	1685,123,000
1896	78,884,000	...	31,764,000	1799,975,000
1900	3,693,000	...	21,456,000	2339,700,000
1905	38,945,000	...	21,364,000	2883,109,000

No banking reader can fail to be struck by the insignificant volume of the above gold and silver movements as compared with the currency. The largest gold movement shown in the table is a net export during 1896 of nearly 79 million dollars. Big as that looks in print, it was only about 4 per cent of the aggregate currency then in existence, namely, 1800 million dollars. The only other two comparisons of any weight are the net gold export of nearly 52 million dollars in 1865 and that of 39 million dollars in 1905. But the former represented less than 7 per cent of the contemporaneous volume of currency, and the latter was barely 1½ per cent. Even in such difficult times as New York has been passing through of late, it has shown quite as much power to draw gold from Europe as Europe has to draw gold from it. In any case the final

balance on the year is seldom likely to be so large as either to add to or to subtract materially from the gold in the country.

In the United States gold is not merely currency, it is also banking capital: and the latter function is gradually becoming the more important of the two. Fully 40 per cent of the gold and silver in nominal circulation is really held by the banks as banking reserves. Of the increases recorded from year to year, between 30 and 40 per cent also goes into bank-vaults and remains there. On every gold or silver dollar they store, the banks can make four dollars of loans or discounts. That, as the following table (IX.) shows, is where the "hard" dollar finds its chief vocation:—

IX.—SPECIE IN UNITED STATES BANKS, 1893-1905.

	In National banks.	In State banks.	Total in banks.	Total in circulation.
1893	$251,253,648	$141,133,000	$392,386,648	$908,807,000
1894	218,041,223	152,257,000	370,298,223	1022,708,000
1895	206,712,410	136,790,000	343,502,410	1037,944,000
1896	225,540,709	121,499,000	347,039,709	1021,638,000
1897	252,163,552	139,248,000	391,411,552	1137,961,000
1898	328,600,711	151,109,000	479,709,711	1321,657,000
1899	314,825,376	154,601,000	469,426,376	1433,677,000
1900	359,672,224	160,933,000	520,605,224	1524,488,000
1901	369,652,498	164,101,000	533,753,498	1645,039,000
1902	391,281,661	164,598,000	555,879,661	1732,729,000
1903	378,290,426	192,438,000	570,728,426	1803,081,000
1904	484,187,822	206,366,000	690,553,822	1887,547,000
1905	495,479,453	211,176,000	706,655,453	1873,491,000
Increase, 1893-1905	244,225,805	70,043,000	314,268,805	964,684,000

Unreasonably large as the bank holdings of specie may appear to be, compared with the total amount in circulation—namely, 706 million dollars out of an aggregate of 1873 millions—it is certainly not over-estimated. It represents only the amounts held by banks reporting periodically to the Comptroller of the Currency. For non-reporting banks, trust companies, and other quasi-banking institutions, a further allowance of probably 300 million dollars ought to be made. In round figures, the bank holdings of gold and silver at the end of 1905 had been about one thousand million dollars, or 60 per cent of the whole amount in circulation. It is again a question if some allowance should not be made for the large amounts of American gold coin generally held by European banks. If all the non-current stocks of gold could be completely eliminated, the effective gold currency—that is, gold in the pockets of the people—would be a comparatively small residuum.

The main question before us, however, relates to the specie held by the banks as cash reserves. That is not, properly speaking, currency, and ought not to be treated as such. It serves quite a different purpose, and has to be judged by different principles. From the point of view of the banks it is "ear-marked" gold, not unlike the special gold reserve which the Government of India holds at the Bank of England against its note issues. From the point of view of the

public it is phantom gold, as the banks cannot part with any of it without proportionately reducing their deposits, which implies reducing their advances.

The buoyancy and feeling of confidence which rising gold reserves give to the banks and their customers may be very misleading. Their expansion may quite as often be a bad sign as a good one. Just as a large increase of national bank-notes may simply mean the creation of many new national banks, so a large increase in the gold reserve of a bank may merely indicate an extension of its advances. As has been already remarked, every dollar of gold may be made the basis of four dollars of liabilities. The gold dollar itself is a small detail compared with the use made of the four dollars of banking credit based on it. If that be bad, the 25 per cent of gold reserve held against it will be a very partial safeguard for the creditors and shareholders of the bank.

This drawback is not peculiar to the United States, however. It is common to the cash reserves of all modern banks. Precisely in the same way they have a tendency to foster false confidence and to encourage undue expansion of banking credit. Why do London bankers watch with anxious and eager eyes every shipment of gold received from abroad? Not for the sake of the gold itself, but because the mere possession of it will justify them in increasing their dis-

counts and advances to four times the amount of its nominal value. When the gold goes out again, it takes with it banking power to four times the amount of its nominal value. That is why there is so much wailing in one case and rejoicing in the other.

A gain of one million sterling in the Bank of England reserve or of five million dollars in the cash reserves of the New York associated banks may become the occasion of banking operations which will end in losses of three or four times as much. In such cases the "hard" dollar may be a delusion and a snare. I would not go so far as to say that a plethora of gold has caused as much unsound banking as a plethora of paper, but it has certainly the same tendency. At best, specie reserves are sterilised banking resources. They earn nothing, and they are no check on bad banking. They are simply a portion of the assets of a bank set aside to be readily available as salvage in the case of shipwreck. Therefore though two thousand million "hard" dollars may look magnificent in a currency return, the Americans should never forget that 60 per cent of them is "ear-marked" by the banks and trust companies. It is like the "emergency" cab at a German railway station, only available in case of war or earthquake.

BOOK II.—ITS ORGANISATION.

CHAPTER IX.

ITS TWENTY THOUSAND BANKS.

I.—THE STATE BANKS.

THE pivot of American finance is a banking system which includes no less than twenty thousand banks. The actual number given in the latest annual report of the Comptroller of the Currency (December 1905) was 19,910. It is not an unreasonable assumption, therefore, that they have since reached, if they do not exceed, 20,000. The Comptroller divides them into three classes: 1, National; 2, State and other banks; 3, Non-reporting, which we may take to mean private banks. The relative strength of the three divisions was as follows:—

BANKING POWER OF THE UNITED STATES, DECEMBER 1905.

	No.	Capital.	Deposits.
National banks .	5,668	$791,567,231	$3783,658,494
State and other banks. . . .	10,742	671,599,149	7567,080,822
Non-reporting (private banks)	3,500	76,664,000	435,582,000
	19,910	$1539,830,380	$11,786,321,316

These figures will be a surprise even to the intelligent reader. It may cause him a shock to discover suddenly a vast money power of which he has hitherto had a very dim, hazy, and inadequate conception. There are not many American institutions under-estimated in these days even by foreigners, and still less by the Americans themselves. But here is one—the banking system. How many people had any suspicion that the United States possessed twenty thousand banks with an aggregate capital of close on 1540 million dollars, and deposits amounting to 11,786 million dollars, equal to 2357 millions sterling? The ordinary man stands aghast before such figures. He requires all his arithmetical skill to grasp them merely as figures. Their political and financial significance may be quite beyond him. He might think he was being made fun of if he were told that these twenty thousand banks are the real rulers of the United States.

Nevertheless, that is about as sure as anything can be in the obscure and confused sphere of political economy. The money power was never stronger or farther reaching in the United States than it is to-day, and it operates chiefly through these twenty thousand banks. Through them it controls elections, which means that it controls Congress: it dictates the policies of the principal railroads, and it has a dominant voice in all the great industrial organisations. The twenty thousand banks form a financial network covering

the whole Union. They have every trade and industry more or less at their mercy. They hatch new schemes and set their own nominees to carry them out. They supply presidents, directors, and lobbyists to all sorts of corporations. They can fit out a railroad, a trust, or an insurance company with a new administration at an hour's notice. They provide Wall Street with pools and syndicates as part of their routine business.

What, indeed, might not be done with nearly twelve thousand million dollars—two thousand four hundred millions sterling—at one's command? Even a fool might boss creation with such a weapon in his hand. But take a few thousands of the brightest men in America, and what may they not do with twelve thousand million dollars? Practically they may do whatever they like, and that is just what they have been doing for a good many years past. But for the financial combinations which the twenty thousand banks rendered possible, there could have been no Steel Trust, no Coal Ring, no Railroad Mergers, no two million share days in Wall Street. All the heroic finance—or, as they would call it in Boston, the "frenzied finance"—of the past decade is an outcome of banking operations carried on with boundless energy and resources.

Where everything has been shooting up like Jonah's gourd, it is a real distinction to be foremost. That distinction belongs undoubtedly

to the banks of the United States. The crops, the output of minerals, manufactures, railroad traffics, foreign trade, may all show phenomenal growth, but the crowning glory of all is the progress of the banks. This dates in a special manner from 1893, when the repeal of the silver purchasing clause in the Sherman Law reassured the country as to its monetary standard. At the end of 1893 there were in the United States about 13,000 banks of all kinds—national, state, and private. At the end of 1905 they numbered close on 20,000—an increase of fully 50 per cent. The total resources of the 13,000 banks in 1893 were estimated at 7500 million dollars or 1500 millions sterling. The 19,910 banks in operation at the end of 1905 possessed aggregate resources of 11,786 million dollars—nearly 60 per cent increase.

Nearly seven-eighths of these banks furnish periodical reports to the Comptroller of the Currency as to their condition and their operations. A detailed comparison can be made of these in the two years 1893 and 1905, distinguishing their capital stocks, circulation, deposits, loans, &c.

[GROWTH OF BANKS

GROWTH OF UNITED STATES BANKS, 1893-1905.

	1893.	1905.
National Banks—		
Number	3807	5668
Loans	$1843,600,000	$3929,500,000
United States bonds	224,000,000	569,900,000
All other bonds	148,500,000	669,500,000
Cash	310,300,000	679,700,000
Capital stock	678,500,000	771,600,000
Surplus	350,200,000	615,300,000
Deposits	1465,400,000	3783,600,000
State, &c., Banks—		
Number	5685	10,742
Loans	$2348,100,000	$5097,800,000
United States bonds	149,900,000	18,700,000
All other bonds	859,600,000	2729,700,000
Cash	205,600,000	314,200,000
Capital stock	406,000,000	671,600,000
Surplus	346,200,000	824,200,000
Deposits	3070,400,000	7567,100,000
All Banks—		
Number	9492	16,410
Loans	$4191,700,000	$9,027,200,000
United States bonds	373,900,000	588,600,000
All other bonds	1008,100,000	3,399,200,000
Cash	515,900,000	994,100,000
Capital stock	1084,500,000	1,463,200,000
Surplus	696,400,000	1,439,500,000
Deposits	4535,800,000	11,350,700,000

Since 1902 the banking statistics have been enlarged by taking in all the information that

can be obtained about "non-reporting" banks, or outside banks as we might call them. But so far only the capital stocks and deposits have been fully returned. These were as under in 1902 and 1905:—

UNITED STATES NATIONAL, STATE, AND PRIVATE BANKS, 1902 AND 1905.

	1902.	1905.
National Banks—		
Number	4535	5668
Capital	701,990,554	791,561,231
Deposits	3098,875,772	3783,658,494
	$3800,866,326	$4575,219,725
State, &c., Banks—		
Number	7889	10,742
Capital	499,621,208	671,599,149
Deposits	6005,847,214	7567,080,822
	$7505,468,422	$8238,679,971
Non-Reporting Banks—		
Number	3732	3500
Capital	138,548,654	76,664,000
Deposits	478,592,792	435,582,000
	$617,141,446	$512,246,000
All Banks—		
Number	16,156	19,910
Capital	1340,160,416	1539,830,380
Deposits	9583,315,778	11,786,321,316
	$10,923,476,194	$13,326,151,696

It will not require very close study of these figures to correct some popular errors as to the banking power of the United States. First, it will be seen that the national banks, far from constituting the chief part of it, hold only a secondary place. At the end of 1905 they were less than a third of the total number: they owned little more than one-half of the capital stock, and held only about one-third of the deposits. The "state and other" banks are still nearly double the number of the national banks. Though they have considerably less capital—671 million dollars against 791 millions—they controlled twice the amount of deposits—7567 million dollars against 3783 millions. Therefore, however strict the supervision of the national banks may be,—and that point is also open to question,—practically two-thirds of the banking operations of the United States are outside of such supervision. At least 8000 million dollars of deposits have to take care of themselves.

How they are taken care of is a question beyond the range of official statistics. One significant fact we know about them, however—namely, that New York has the occasional use of large portions of them. The forty-two clearing banks in New York generally hold over one thousand million dollars of deposits, which would be fully a twelfth of the total deposits in the United States. Assume that the non-clearing banks have only a fourth as much as those in

the clearing, and that will be another 250 million dollars. On this calculation New York would control one-ninth of all the bank deposits in the United States. Moreover, it has a special call on the 10,000 million dollars of deposits outside of New York. When it is pinched for money it can always attract whatever there may be to spare in the interior by offering suitable rates for it. Being a central reserve city, country banks are allowed by law to keep 15 per cent of their legal reserves there. Deposits in New York count as cash in their own tills, and they may often earn more with the money in that way than they could at home.

The forty-two clearing banks in New York perform functions somewhat akin to those of Lombard Street. They attract surplus money from the interior and trade with it. How they trade and what they trade in are their own secrets. No official inspection has ever yet penetrated far into that mystery. It is certain that they do not run after foreign bills as Lombard Street does, or vex their souls over 2½ or 3 per cent discounts. Wall Street offers them much more lucrative employment. After all, it is easier as well as more exciting to finance a blind pool or a "merger" than to keep a lynx eye on piles of commercial bills.

Other serious reflections are suggested by the twenty thousand banks. The United States has one bank for every four thousand of its popula-

tion. Their capital averages only $80,000, their surplus profits $74,000, and their deposits $550,000 each. Outside of New York and other large cities these averages would be much smaller still. Needless to say, such a network of banks must have taken in almost every inch of ground where a banker could expect to live. By the law of 1900 the minimum capital with which a national bank could be incorporated was reduced as low as $25,000 or £5000. After that the smallest village in the Union could hardly grumble about lack of banking facilities. The $25,000 minimum started a crop of small country banks which have so far proved very useful, and if they can only keep their heads level they may give a great impetus to the progress of the south and west.

Seeing that it is only within the past half century that the Americans out West have taken kindly to banking, its progress after it did begin to grow must have been amazingly fast. If we were to go back two generations we might find only hundreds of banks where there are now thousands. A little farther back still and we can only count them by scores. In the infancy of the Republic they could have been counted on the fingers of one hand. The first of any note was the Bank of North America, projected by Robert Morris, the Superintendent of Finance to the Continental Congress. There would appear to have been two or three state banks of still older origin. The little information regarding

these that has come down to us is somewhat legendary. It is besides self-contradictory. One historical authority affirms that in 1791 there were only three state banks in operation. Another is equally positive as to there having been about a dozen. He even mentions the aggregate amount of capital—namely, 19 million dollars.

The systematic development of American banking must date from 1790, the year in which Alexander Hamilton became the first Secretary of the Treasury to his friend the first President. Hamilton projected a bank of his own to enable him to carry through his great funding scheme. This first Bank of the United States was chartered in 1791 for twenty years, and doubtless it discouraged the organisation of state or local banks. Nevertheless, when its charter expired the state banks had increased to 88, and their aggregate capital had grown to 44 million dollars. They showed, strange to say, a much higher average of capital than their twenty thousand successors do in these record-breaking days. It matters little now how many banks there were in 1811, as a clean sweep was made of them in the crisis of 1814.

The history of American banking consists of four distinct episodes. The first may be distinguished as the constitutional episode of 1790, when a banking system had to be devised as part of the administrative machinery of the Republic. The second centres in the war of 1812, and ex-

tends onward to 1820. The third was the state bank dispensation of sinister memory which began with General Jackson's "bank war" in 1829, and ended with the arrival of Secretary Chase at the Treasury in 1861. The last of the four episodes opened with the National Bank Law of 1863, and is still in process of development. It cannot be accepted as a settled question that the National Bank is to be the bank of the future.

Official records relative to banking do not appear to have been carried farther back than 1834. In that year the number of banks and branches within the Union is given for the first time. It is 506, but from this point onward they increase rapidly. The fall of the second Bank of the United States at this time was a misfortune in disguise for them, just as the fall of its predecessor in 1811 had been. It gave them opportunities of expansion which they failed to make prudent use of, and in the end they were worse off than before. To be just to them, however, their misfortunes were not wholly due to mismanagement. The conditions under which they had to work rendered sound banking almost impossible. They were all banks of issue, and had to live chiefly on their issues, deposits being as yet a very secondary item. Fortunately, official records of circulation have been preserved from 1800 onward, and in their violent fluctuations we can read plainly enough how booms and reactions succeeded each other.

In 1800 the bank-notes circulating in the United States were officially estimated at 10½ million dollars. The total amount of specie in the country is supposed to have been about 17½ million dollars, so that the notes were well protected, assuming the banks to have held a fair proportion of the available specie. But in 1810 the situation had changed for the worse. There were now 28 million dollars of bank-notes in circulation, but the stock of specie in the country had not kept pace with it. Instead of trebling as the notes had done, it had barely doubled, having risen only from 17½ million dollars to 30 millions. In 1820 we find the paper money still growing much faster than the specie. The former had advanced to nearly 45 million dollars, while the latter had receded to 24 millions. The ratio of specie to paper was thus not much over 50 per cent.

In 1830, when the "bank war" began, as President Jackson's campaign against the second Bank of the United States was called at the time, the total note issues were 61 million dollars against 30 millions of specie in the country. The ratio of specie to paper money had now sunk to 33 per cent. But in 1834 it had somewhat improved, the note issues having risen to 94 million dollars, and the specie in the country to 41 millions. The Bank of the United States having, on the expiry of its charter in 1836, been shunted into Pennsylvania, the state banks made a rush

for its business, particularly for Government deposits. The natural and appropriate effect is seen at once in inflated note issues. They jumped in 1836 to 140 million dollars, and next year to nearly 150 millions. All other kinds of money were proportionately inflated, the total circulation having increased in 1836 to 200 million dollars, and in 1837 to 217 millions.

These figures are most significant. They illustrate the first important episode in the history of the state banks. Previous to the "bank war" they had been comparatively small and harmless institutions. They now come to the front, and for a time they controlled the financial administration of the Union. During the quarter of a century that intervened between the death of the United States Bank in 1836 and the birth of the national banks in 1863, they had to finance an immense and rapidly growing country beset with novel conditions and requirements. If they were not always successful, the magnitude of their task has to be considered in mitigation of judgment. At the same time, it must be frankly admitted that the state banks did break down at one of the most critical junctures in the economic development of the republic.

No country ever had greater need of good banking than the United States had from 1820 onward. No country ever offered finer opportunities for it. In 1830 the settlers on the Atlantic coast had at last surmounted the great

mountain-barrier which shut them out from the fertile valleys beyond. Roads and fragments of primitive railway had penetrated the passes of the Appalachian range. Clear beyond to the Mississippi and the Great Lakes, the country lay open inviting settlement. Pioneers by the thousand were striking across into Ohio, Indiana, and Illinois. There was everywhere an insatiable demand for homesteads, for roads, for local markets. No state government could or would ignore it. Money had to be found for the urgent needs of the pioneers. Loans had to be raised in the East and in Europe. Banks had to be established wherever there was business for them, and the people were not too prejudiced to accept their help. But badly as they were needed the people seldom gave them a hearty welcome. They were still distrusted because of their sinister past. Even when they obtained charters, it was not without many conditions and prohibitions being imposed on them.

Foreign students of the currency and banking laws of the United States often encounter what appear to be arbitrary and capricious restrictions. For example, customs revenues are not available for bank deposits, but must remain locked up in the Treasury until paid out under a legal appropriation. The redemption of national bank-notes is limited to a maximum of three million dollars per month. Certain types of currency are legal tender, while others equally good are

not. Some are receivable for all Government dues and others are not. Some are available for national bank reserves and others are not. No doubt the industrious critic who searches out the origin of these curious anachronisms will in most cases find an original reason for them. But, like the Russian sentry who on a special occasion had been posted at the door of the Kremlin, and continued to stand there long after the occasion had been forgotten, they are often mere spectres of long-dead controversies.

All the banking and currency legislation of the wild-cat period of American finance teemed with restrictions. That was, in fact, one of its most distinctive characteristics. The "rag-money" legislators had their periodical fits of caution in which they piled up prohibitions of imaginary abuses. The anti-bank politicians were always exercising their ingenuity in "curbing the money power," and as many of them were lawyers their capacity for hair-splitting was boundless. The banks themselves were no doubt also to blame for the suspicion and mistrust with which they were regarded, even by intelligent members of Congress. Their record in relation to the Treasury was so bad that every time they were given a new trial, precautions suggested by previous experience had to be taken against fresh abuses. Even the two Banks of the United States had not been models of honest and faithful administration. As for the state banks, they had

on three separate occasions proved themselves unfit guardians of Government funds. In 1791, in 1812, and again in 1833, they had grossly betrayed what ought to have been considered a sacred trust—the keepership of public monies.

The last trial that was given them—namely, in 1833—was evidently regarded by the Government of the day as a risky experiment. Even President Jackson, when he withdrew the Government deposits from the second bank of the United States, was not at all eager to hand them over to the state banks. Passionate advocate as he was of state rights, he had seen enough of state banking to shake his faith in it. If an independent treasury had been practicable at the time, he and his Cabinet would have preferred that solution of the difficulty. It was out of the question, however, and the state banks had once more to be utilised temporarily at least. But a strict bargain was made with them, the details of which are very interesting reading at this distance of nearly three quarters of a century. The contracts of 1833 between the Treasury and the deposit banks bristle with prohibitions and provisos, faint echoes of which recur in corresponding documents of the present day.

The chief conditions imposed on the deposit banks were—(1) that they should give security for all Government money in excess of one-half of the bank capital paid up; (2) that they would keep one-third of their reserve in specie; (3) that

they would issue no small notes; (4) that they would mutually agree to honour each other's notes and drafts, and do everything necessary to provide "a general currency, at least as sound as that of the Bank of the United States"; (5) that they would perform for the Government all the services formerly rendered by the Bank of the United States in the collection and disbursement of public monies. The Treasury reserved the right to demand at any time security for deposits even when they were less than one-half of the bank's paid-up capital. Two years later Congress passed an Act to regulate the deposits, which made the conditions even more stringent. Banks not paying their notes in specie were now absolutely disqualified.

It would be difficult to imagine a more ironclad agreement, nevertheless it was not strong enough to protect the Government deposits. Its immediate effect, of course, was a startling increase of state banks. In a few years they doubled their number and more than doubled their capital, while their discounts and loans were nearly trebled. In 1837 the Government had fully thirty millions of dollars on deposit, derived chiefly from a land boom which led to enormous sales of public lands, and at the same time gave a strong fillip to customs and other revenues. In this sudden flood of prosperity both the Government and the banks lost their heads. The former was naturally anxious to take advantage of the

boom for strengthening the currency, which consisted chiefly of state bank-notes. The Treasury, having the banks under its thumb, had only to issue its orders to them, which it proceeded to do in a somewhat abrupt fashion.

Two separate sets of edicts were issued—one declaring that certain denominations of small notes would not be receivable at the Treasury after specified dates. All notes under five dollars were to be tabooed on and after the 30th September 1835, and all under ten dollars on the 4th July 1836. The second set of edicts was addressed directly to the banks. It forbade them to issue any more notes under five dollars after the 4th July 1836, or any more under ten dollars after the 30th March 1837. These proclamations had an effect which President Jackson and his Cabinet had not foreseen. They started a great rush of speculators and settlers for public land in order to be able to pay for it in small notes while these were still current. The Treasury was in danger of being gorged with paper money, much of which might be left on its hands. It learned that ten or twelve million dollars more of the same undesirable currency was on its way to the Land Office. Prompt and drastic action had therefore to be taken. Like a thunderbolt President Jackson's "specie circular" fell on the country—requiring payments for public lands to be made in gold or silver.

This was on the 11th July 1836. The land

boom was at its height, trade of every kind was wildly inflated, the banks had just begun to draw in their excessive issues. Bankers, traders, and land speculators were all "knocked in a heap." The Government naturally was the heaviest loser. Fully three-fourths of its 32 million dollars of bank deposits had to be accepted in bank-notes, which depreciated on an average 10 per cent. Its exact loss was about two and a half million dollars. That was the last of the state banks as depositaries of public money. Their collapse in 1837, besides causing great loss and inconvenience to the Government, plunged the country into the worst financial panic it had so far experienced. Not only was the public service paralysed, but business of all kinds was brought to a standstill. So severe was the crisis that an extra session of Congress had to be called in September.

In the history of American finance there are two or three special periods in which important events seem to be crowded. More happens in them, greater changes take place, they are more prolific of new ideas and impulses than five times the number of ordinary years. The panic of 1837 opened one of these exceptional periods, and it did not close till 1842. Not only for the banks but for the Treasury and for the whole financial policy of the Republic these were five memorable years. They are matched only by the seven-year struggle over the framing of the constitution and

the funding of the public debt (1783-90). The financing of the Civil War, from 1861 to 1865, made another special episode, but it was not so far-reaching as the two earlier ones. It did not open up so many fundamental issues, nor did it leave such a strong mark on the financial organisation of the country.

It was in the prolonged crisis of 1837-42 that the fate of the state banks was finally decided; that the question of an independent Treasury was definitely settled; and that specie payments were made an express rule of the public service. The effect of these decisions on the future principles and practice of American finance would be almost impossible to over-estimate. It was clearly seen in the many discussions over the war finance of Secretary Chase. There is no difficulty in finding traces of it in the banking and currency discussions of our own day. The lesson which was then burned into American financiers and politicians has never been wholly forgotten. Some of its least important details have survived, and banking legislation is still unconsciously governed by ideas which had life then, though they may be fossilised now.

The story of the long fight over the independent Treasury will be found in another chapter.[1] It was the victor in the struggle, and the state banks, whose history we are tracing, were the victims. Perhaps it may have been some con-

[1] Chapter XI. "Its Banking Treasury."

solation to them at the time that the Government had to pay dearly for its victory. In forcing through its policy of specie payments, it had to replenish the Treasury over and over again. Between 1837 and 1843 it had to obtain from Congress eight separate Acts authorising issues or reissues of Treasury notes. The total amount authorised was 42 million dollars, but only two-thirds, or, say, 28 million dollars, were original issues, the rest being reissues. The whole 42 million dollars was needed simply to cover deficits in the annual revenue, and it hardly sufficed even for that. This was a bitter change for a Government which in the half dozen years immediately preceding had accumulated 37 million dollars of surpluses.

The state banks required nearly twenty years to recover from the shock of the complex crisis, which began with Jackson's anti-bank crusade and culminated in the panic of 1837. How badly crippled they were is shown by the great shrinkage in their numbers and their note issues which took place between 1840 and 1843. The former declined from 901 to 691, and the latter from 107 million dollars to 58½ millions. That was their low-water mark, and a gradual though slow recovery now set in. The year 1853 became the starting-point of another healthy expansion. The number of banks and branches in the Union rose from 750 to 1208, and went on increasing year by year till in 1859 it reached 1476. On the eve of

the Civil War there must have been about 1500 state and local banks operating in the Union.

The bank reformers who maintain such a vigorous outcry for elastic currency have, we fear, not studied very closely the currency record of the state banks at this period, when they had almost a monopoly of the issues. The Treasury notes above mentioned were their only paper rivals, and even they gradually disappeared as the Treasury got its accumulated deficits paid off. So erratic are the variations in the bank issues, that it is impossible to discover the semblance of a fixed principle in them. We have seen that in 1843 they had fallen as low as 58½ million dollars. Five years later (1848) they were up to 128½ million dollars. In another five years they had expanded to 188 millions, and on the eve of the commercial panic of 1857 they made a record of 215 million dollars. As may be readily imagined, they suffered a tremendous set-back in the succeeding twelve months. In 1858 they dropped to 155 millions,—a loss of 60 million dollars, or nearly 30 per cent, in a few months.

That was elasticity with a vengeance. State bank issues were decidedly violent in their movements, both upward and downward, but especially downward. This is a circumstance to bear in mind in discussing the very thorny question of "assets" currency. Another is the surprisingly small effect that the loss of their circulation

had on the state banks after its transfer to the national banks in 1863. It had been such an important factor in their economy that it might have been thought they could hardly survive its loss. Nevertheless they seem to have got on wonderfully well without it. Far from languishing from want of it, they have increased and multiplied as they never did before. A plentiful crop of private banks has also sprung up which manage to thrive without the adventitious help of note issues. Of the 16,410 banks which reported last year (1905) to the Comptroller of the Currency, fully two-thirds had no circulation whatever. They numbered 10,742 against 5668 note-issuing (national) banks.

BOOK II.—ITS ORGANISATION.

CHAPTER X.

ITS TWENTY THOUSAND BANKS.

II.—THE NATIONAL BANKS.

WHETHER or not the state banks could have borne the strain of the Civil War unaided is no no longer a practical question. At the outset of the war they were virtually superseded by a new class of banks, specially designed to assist the Treasury in raising the incalculable millions which it was about to need. The prestige which the national banks gained by successfully performing the tremendous task they had undertaken was so great as to make them masters of the banking situation. It was prematurely assumed that no other class of banks—state or private—would any longer have a chance against them. Immediately after the war a rush was made for national bank charters. In the year 1865 over one thousand of them were granted, and their aggregate capital exceeded 242 million dollars.

The high return obtainable on United States

bonds made them a good investment apart from the extra profit obtainable on circulation. But this gradually disappeared as the bonds advanced to a normal level and the applications for national bank charters fell off proportionately. In 1869 they dropped to nine in number and to a million and a-half dollars in aggregate capital. In the same year fully twice as many banks closed, so that in the year there was an actual diminution. The same thing happened again in 1870, and the three years, 1868-70, showed a net decline of 72 banks with fully three and a-half million dollars of capital. From 1871 to 1875 inclusive was a period of moderate progress, after which came four years of reaction, resulting in a net reduction of 42 banks.

Early in the eighties the expansion of railroad building and of business generally called for greater banking facilities. The multiplication of national banks was hampered, however, by the scarcity of United States bonds to issue circulation against. They had risen to prices which left little or no margin of profit on the note issues. As there was no prospect of the supply of bonds being increased, it was gravely proposed in some quarters to authorise the use of foreign Government securities as an alternative. The question came up repeatedly at the Bankers' Conventions of those days as well as in Chambers of Commerce. Mr John Jay Knox, the then Comptroller of the Currency, advocated such a

broadening of the currency basis. He became quite enthusiastic over the great possibilities he saw in it. Among other indirect benefits it was to be a long step toward the fulfilment of New York's ambition to become the money-market of the world. In an address to the New York Chamber of Commerce in May 1882, he said:—

> I expect not long hence to see in the newspapers of this city advertisements of your eminent bankers for the purchase and sale of Consols, French Rentes, and the securities of other nations of the globe, as well as the quotation of their funds in your commercial journals. Their purchase and sale will be among the first indications that New York will contest with London the right to be the monetary centre of the world.

Eighteen months later (October 1883) Mr Knox returned to his favourite theme at the Louisville Convention of the American Bankers' Association.

> I do not suppose it probable [he said] that Congress would consider such a proposition at present, but certainly, in view of the rapid payment of our public debt, of the numerous banks yearly established, the future magnitude of the system, and the importance of preserving it in its present form, the employment of foreign debts as security for one-half or one-fourth of the circulation of the (national) banks would seem to be a proper subject for the consideration of this Association.

Everybody admitted that Mr Knox had a good case, and that "something should be done," but banking reforms move slowly on the other side of the Atlantic as well as on our own. While Mr Knox was agitating for more elbow-room for

national bank issues, London bankers were fidgeting over the narrowness of their central gold reserve. In both countries a broader basis for circulation was urgently needed, but in neither case was anything done for several years, and then the usual makeshift had to suffice. The national banks obtained temporary relief in 1895 and 1898, when new issues of Government bonds had to be made. The London banks have not got even that much as yet. Lord Goschen in 1891 suggested a plan for a second gold reserve based on a special issue of one-pound notes. It was too Scotch a medicine, however, and had to be quietly dropped.

From 1880 down to the panic of 1893 American trade was so buoyant that circulation ceased to be a matter of much consequence to the national banks. Many new banks were organised in spite of the high prices of United States bonds. But in 1893 a violent swing round took place, and in the following half-dozen years many more national banks died than were born. These seven years produced a net diminution of over two hundred national banks with nearly fifty million dollars of capital. This alarming decline was stayed by the law of 1900, which confirmed the gold standard and provided further facilities for the establishment of national banks. The combined effect of that Act and of the very favourable commercial conditions under which it was launched was another national bank boom. Between March

1900 and October 1905 the enormous number of 2737 new charters were issued with an aggregate capital of 161 million dollars. But on the other hand liquidations and insolvencies were proportionately active. In the five years they aggregated 481, with an aggregate capital of nearly 130 million dollars.

The instability, or shall we say fickleness, of the national bank system has been so strikingly manifested in this latest movement, that the details deserve careful study:—

NO. 6.—NATIONAL BANKS ORGANISED AND LIQUIDATED, 1900-1905.

	Organised.		Liquidated.	
	No.	Capital.	No.	Capital.
1900	383	$19,960,000	49	$14,274,000
1901	394	21,554,500	50	9,175,000
1902	470	31,130,000	73	22,640,000
1903	553	34,333,500	84	34,200,000
1904	431	21,019,300	85	21,820,000
1905	506	33,532,500	143	26,444,000
	2737	$161,529,800	484	$128,553,000
Average capital .		$59,000		$265,000

At first blush the above appears to be a very satisfactory record of progress, but there is a reverse side to it. New banks to the number of

2737 organised in less than six years, shows genuine rustling. And a gain of 161 million dollars of banking capital in the same period would be magnificent if genuine. Unfortunately there are offsets which completely destroy the illusion raised by the original figures. Against the 2737 small banks created, with an average capital of $59,000 each, 484 large banks, averaging $265,000 each, passed out of existence. The net gain in banking capital during the six years is thus reduced to an insignificant 33 million dollars—little more than five million dollars per annum.

These figures are obtained from Table No. 6 (p. 71), in the report of the Comptroller of the Currency for 1905. It must be admitted that more favourable showings are made in other tables in the same report. In fairness, therefore, we must refer to these also, and we would gladly have offered some explanation of the discrepancies between them, had it been discoverable. The tables as they stand frequently contradict each other. Table 8 (p. 73) gives an abstract of the annual operations of the national bank law from the year 1864 down to 1905. The figures for the years 1900-1905, as given below, differ widely from those already quoted from Table 6.

[No. 8.—National Banks

No. 8.—National Banks Organised, in Voluntary Liquidation, Insolvent, and in Active Operation on 1st January in each Year.

	Organised.	In voluntary liquidation.	Insolvent.	In active operation.	Capital of banks in active operation.
1900	5240	1261	373	3606	$608,588,000
1901	5662	1302	379	3981	635,309,000
1902	6074	1351	386	4337	670,164,000
1903	6566	1421	389	4756	723,416,000
1904	7081	1495	402	5284	767,567,000
1905	7541	1565	422	5554	785,411,000
Increase, 1900-1905	2301	304	49	1948	$176,823,000

The periods covered by the two tables do not exactly correspond—that of No. 8 being the calendar year, while that of No. 6 is the year ended October 31. But this would account for a very small part of the discrepancies between them. There is a substantial difference between 2301 and 2737 as the number of new organisations. There is a still larger difference between the new organisations and the net increase of banks in active operation on January 1—namely, 1948. But the most perplexing as well as most serious difficulty occurs in the two versions of capital increase during the six years. In No. 6 table it is a trifle of 33 million dollars, while No. 8 makes it $176,823,000 or nearly six times as much.

This is a question of obvious importance, not for the national banks only, but in other respects. The expansion of national bank resources has always been adduced as one of the most striking testimonies to the prosperity of the past decade. It is essential, therefore, to know how far that expansion is really solid and *bonâ fide*. Again, the national banks are closely associated with the question of elastic currency. It is invariably assumed that they must be the channels through which elastic currency is to be provided. It is also possible that their future depends a good deal on the solution of the currency problem. If they were to lose their rights of issue their original *raison d'être* would be gone. A national bank could hardly be imagined apart from note circulation based on United States bonds. When the supply of these again runs short Congress will, I suspect, be loath to sanction substitutes for them such as were advocated by Mr John Jay Knox twenty years ago.

The ambition of New York to deal in Consols and French Rentes, if it ever existed, has considerably toned down. A bank issue, based on foreign Government funds, or even on state and municipal bonds, might appeal to bankers, but hardly to the general public. Much less is there any traditional sentiment attaching to the national bank system. It was an artificial arrangement, made for a special object at a

great national crisis. That object having been served, only the complex and artificial part of the arrangement survives. Its note issues, based on Government bonds and hedged round with unbusiness-like restrictions, have become an anachronism. Their drawbacks grow more and more prominent, while their redeeming features, if they have any, begin to fade out of sight.

Government bonded issues are neither scientific nor economical. They cannot even be called popular, for the average American will sooner take a greenback or a silver certificate than the note of a national bank which he knows nothing about. They lack even the first requisite of sound paper money-assured convertibility into gold. All the assurance they convey to the holder is that an equivalent amount of United States bonds is held at Washington against them. The issuing bank need not, unless it likes, have a dollar of gold in its till to meet them. So far as convertibility goes, almost any of the new currency plans that have been proposed would be an improvement on the national bank-note of 1863. The presumption is, therefore, that it will have to go. No matter what may take its place, it has the seeds of decay in it and must ultimately disappear.

Then will come the question whether the national banks can exist without their guaranteed note issues. Alternative issues, of course, are possible. Better ones than the present are quite

conceivable, but if so they are not likely to be limited to the national banks. Why should they be? We have shown that these banks constitute only one-third of the banking power of the United States, and why should they have an exclusive privilege of note issue? An efficient scheme of convertible currency would have the special merit of being available for all banks alike—national, state, or municipal.

The national banks do not, therefore, appear to me to have a well-assured future. It is exposed to manifest risks, both as regards circulation and banking proper. The Americans, I think, give them too high a place in their financial system, and attach too much importance to their decidedly erratic progress. *Per contra*, they do not fully realise the enormous amount of banking power which they possess outside of the favoured circle of national banks. It is quite excusable in foreigners to share delusions which flourish so extensively at home. Banks never heard of abroad are nearly double the number of the national banks; they have almost as much capital and much larger reserve funds; while they hold not far from double the amount of deposits. The last is the most striking fact of all. Foreigners are accustomed to think of the national banks as the great deposit-holders of the country, whereas, in 1905, their total was only 3783 million dollars against 8002 million dollars held by state and other banks.

The truth is that, but for two peculiar features, both of them political rather than of financial interest, the national banks would not be at all remarkable institutions. Their distinctive peculiarities are their large holdings of Government bonds, and their Procrustean note issues. Neither of these is essential to a sound efficient bank. On the contrary they may, from that point of view, be regarded rather as drawbacks. It was a very happy thought for the Government in 1861 to have new banks specially organised as bond carriers. So helpful have they been in that line of business, that when the national credit was at its lowest ebb, and the financial outlook was gloomiest, a home market for Government bonds was always available. When better times returned the national banks accelerated, in no small degree, the recovery of the bonds from war prices, and when national credit was re-established they carried it to the highest level that any public stock has ever reached.

United States Two per cent bonds, standing over par, represent to-day the pinnacle of national credit, and it could never have been reached without the co-operation of the national banks. Only the five hundred million dollars of national banknotes, based on United States bonds, have rendered such a thing possible. A banking system which raises United States Two per cent consols fifteen points higher than British 2½ per cent consols is sure to be indulgently criticised by

its owners, no matter what its counterbalancing defects may be. And any note issue associated with so successful a result will have a strong presumption in its favour to start with. But if the Americans could detach their national banking from all its historical and sentimental associations, and apply to it their cold common-sense, they would find, I believe, that the note issues are the weakest part of it.

These note issues have done a good deal more for the Treasury than they have done for the public, or for the banks themselves. As bond-distributing agencies, they have proved a complete success; but as currency they are cumbrous to work and costly to maintain. When all is said and done, the issuing banks derive very little advantage from them. The Comptroller of the Currency, with disinterested candour, sometimes calls attention in his annual report to the fact that the profit obtained from circulation ranges from a little under to a little over 1 per cent per annum, according to the price paid for the Two per cent bonds that have to be deposited against it. On a hypothetical issue of $100,000 the bonds would yield $2000 interest, and the circulation itself, if kept at its maximum all the year round,—a very sanguine assumption,—would produce $6000—together $8000 dollars a-year. But the offsets are many and important—namely, taxes on circulation, $500; sinking fund for premium on bonds,

$103·99; cost of printing notes and provision for redemption, $6250: total, $666·49.

This reduces the $8000 a-year to $7333·51, which is only 6·88 per cent on the cost price of the bonds. If the bank, instead of taking out of circulation, lent its $100,000, it would easily earn 6 per cent on it, so that the odd 0·88 per cent represents all its extra profit on the note issue. Were profit the only consideration in the case, national bank issues would certainly decline. As it is, they are always much short of their legal maximum—namely, the full extent of their paid-up capital. This, in October 1905, was 812 million dollars, but the total circulation at the same date amounted to only 490 millions. On the other 322 million dollars of capital it had, for various reasons, not been thought worth while to utilise the note-issuing power. Some banks, even after they had lodged bonds at the Treasury, did not exercise their right to issue against them. The Comptroller of the Currency refers, in his last report, to ten banks which had bonds to the amount of nearly a quarter million dollars lying in the Treasury, without a note issued against them.

The charge most frequently made against national bank issues is their want of elasticity, but that is by no means their chief defect. It is not lack of elasticity they suffer from so much as a fluctuating and uncertain basis. While the balance continues to tremble between profit and

loss, the volume of notes in circulation at a given time will always be a matter of chance. Various minor defects they also have, which, in the aggregate, may mean a good deal. They require an almost incredible amount of renewal, which entails enormous labour on the Treasury. The expense must also be considerable, whoever pays for it. The average life of a national bank-note ranges from three to five years. About a fourth of the whole mass in circulation—say 490 million dollars—will thus have to be renewed annually. The actual renewals were, up to 1901, rather less than that, but since then they have undergone a sensational expansion. The totals, both of new issues and of notes destroyed in the past three years, are on quite an American scale, as will be seen below:—

NATIONAL BANK-NOTES, 1902-04.

	New issues.	Destroyed.
1902	$133,309,440	$112,745,162
1903	187,249,260	148,112,610
1904	213,462,110	175,782,053
1905	272,590,790	195,194,785

We are not aware of any calculation having been made of the average cost of producing these notes. By the time that the original plates, the paper, the printing, the registration, distribution, and redemption have been all paid for, it will be little if any short of one cent

per note. The above 213 million dollars were issued in large denominations—five dollars up to hundreds,—but even then the total number of pieces was over 11¾ millions. The cost of producing them at the rate of one cent each would be $117,720. And that keeps them alive on an average only four years. Every fourth year it has to be paid over again, whereas a metal dollar may retain its legal weight for fifty years. It is a very doubtful question if paper money, as produced and circulated in the United States, is more economical than metallic money. On careful inquiry it may be found to be less economical.

The late Mr Seyd argued very ingeniously, years ago, that there was no saving in the use of Bank of England notes in place of gold; and if that were true of a currency with a minimum of five pounds, it would be much more true of a currency with seven different denominations, from one dollar up to one thousand. Were it to be proved that national bank-notes are not an economical form of money, their *raison d'être* would be gone. This is one of the contingencies that the national banks might be wise to anticipate. Already they have had to give up several of their early illusions with regard to their note issues, and if this one has to go too, they may have to reconsider the whole question *ab initio*.

Some American authorities are coming round to the view we have maintained for years past —that the national bank issues, as at present constituted, are a much overrated factor, both in the currency and the banking business of the day. Notwithstanding the great expansion they have received from the new banks organised under the law of 1900, they still form but 16 per cent of the total currency. Previous to 1900 they were only 11 or 12 per cent, and in 1892 they fell below 10 per cent. Their relative position in the banking resources of the country is even more insignificant—about 3 per cent of the whole. That banking experts in Congress and out of it should make so much of so obviously subordinate a factor in American finance, is, to say the least, paradoxical.

Whatever may be the future of the national banks, and of American banks generally, note issues are to have much less influence on it than they have had in the past. For all of them the question of the future is not circulation but organisation. The fundamental question is on what line they are to develop. Is it to be on the individual lines which have already produced nearly twenty thousand banking institutions? or is it to be in the European direction, of central banks, with branches spreading all over the continent? Different sections of the Union seem to have different tendencies. In New York the

octopus ideal is favoured, while in the South and West local sentiment is still strong. Some compromise between the two may work itself out if the octopus party do not once more get ahead of nature and upset her primitive ideas.

BOOK II.—ITS ORGANISATION.

CHAPTER XI.

ITS BANKING TREASURY.

THE national treasury, even in its simplest form, is an important factor in the national economy of a state. Directly and indirectly it has a great influence on all branches of private industry, finance, and commerce. If it does not actually provide the currency, it has the chief control over it. Very probably it has a much larger monetary turn-over than any private person or corporation. Its management will set an example, good or bad, to the whole trading community. Even its methods of book-keeping may have a moral influence on all who have to deal with it. The variations in its conditions tell at once on the local money market, and if it be a treasury of the first rank, the international money market may also be affected by them. The banking operations of a country also depend to a considerable extent on those of the Treasury. Where the two work harmoniously, the results

must of course be much more satisfactory than when they are at cross-purposes.

In all the above respects there must of necessity be wide differences between the Treasuries of various countries. They may be strictly limited to fiscal functions, like the British Exchequer; or they may have a national bank associated with them, as in France and Germany; or they may combine fiscal and banking functions within themselves, as in the United States. The United States Treasury is in this respect quite unique, and one of the most vexed questions in American finance is whether or not that double-barrelled arrangement has proved better or worse than the old system. The Americans themselves are much divided on the point. Still more so are European critics, though it must be admitted that few of these have as yet paid much attention to it.

Neither at home nor abroad is there anything like an adequate notion of the great *rôle* that the Treasury has played in the financial and political development of the United States. The commanding position which it holds to-day in the financial world, the immense resources at its command, and the great power it can exercise in financial emergencies, are all but dimly comprehended. The United States Treasury is the strongest in the world as regards metallic reserves. It is, as has been indicated, not a mere Treasury: it is also a bank. It is the largest bank in the United States, and also in the world.

It is the only bank in the United States that has branches all over the Union. Formerly it was the greatest note-issuing bank, and it might on occasion become so again.

To the regular banker in the United States, the Treasury, with its vast ramification of mints, sub-Treasuries, and revenue offices, is a veritable Frankenstein. But the idea of fighting it has long been given up. The banks of 1812, and those of 1833, indulged in Homeric feuds with the "independent treasury" party, but in 1846 they were finally beaten. During the subsequent sixty years there has been no going back on that main question. The Treasury came then to stay; and even among bankers there are few of the old school left who would care to reopen a long-closed issue. All that the banks now wish or hope for is a fair and just agreement with the Treasury as to their respective spheres. They believe that at certain points the Treasury is apt to encroach on their proper business. They also object to some of its rules and methods as tending to hamper their financial operations, and to interfere with the natural movements and trade.

Farther on the series of interesting events which gave birth to the United States Treasury, as it now exists, will be fully narrated. But the reader may be assisted at the outset by a brief explanation of the technical terms used by American financiers in this rather intricate controversy. The word "sub-Treasury," for instance, occurs

very frequently in it. By that is meant the branch treasuries at New York, Boston, Philadelphia, Charleston, St Louis, and New Orleans through which public moneys are distributed. They transact the banking part of the Treasury operations, and in doing so they frequently clash with the regular banks. When an American approves or disapproves of the "sub-Treasury" system, he refers to the banking functions performed by the branch treasuries, and which could not be performed without them. Wherever the name is mentioned it symbolises the issue so often raised at bankers' conferences,—whether or not the Treasury should take part in banking business. Seeing, as a matter of fact, that it has been in the banking business for fully half a century, and is not at all likely to give it up, the practical issue narrows itself down to this—where should the line be drawn between Treasury banking and regular banking?

The briefest glance at the consequences which might be involved in the Treasury ceasing to be its own banker, will convince any qualified judge of the impracticability of such a change. The first step would be almost insuperable. Government accounts would have to be opened with outside banks, and how many of them would be necessary? Is there any existing bank capable of taking over such an account single-handed and assuming the same relation to the Treasury that the Bank of England holds to the British

Exchequer? Or could a group of banks be formed to take it over jointly? Or would it be better to adopt Mr Stickney's bold scheme for forming a central bank *ad hoc?*

To decide a few preliminary questions like these might take as much fighting as was spent over the original question of an independent treasury. And then we should still be only on the threshold of the movement. If a central bank were created to work the Treasury account, how would the old banks feel toward it? Might it not be as inconvenient a competitor for them as the Treasury itself—possibly more so? If some existing bank or group of banks was selected, how would all the others feel about it? Moreover, is there an existing bank, national, state, or private, so organised as to be capable of undertaking such a gigantic task as the banking business of the Government would be? Between the huge volume of Treasury operations and that of the largest trading bank in the United States, there is a wide gulf that could hardly be bridged over even with the combined help of all the multi-millionaires in and around Wall Street. And why revolutionise an institution which, after all, has as much to be said for it as against it? In short, why worry ourselves about the inconceivable and impossible?

The Treasury is by universal admission the most distinctive and unique of American financial institutions. It has grown out of special events

in the financial history of the United States, which have no exact parallel anywhere else. The political organisation in which it holds so prominent a place has few points of resemblance with that of any other modern state. The United States Treasury has, in short, no counterpart abroad, either as regards its evolution, its present position, or its peculiar functions. Those who take only an outside view of its operations may hastily conclude that it is an arbitrary artificial creation, for which a more efficient substitute might easily be devised. A very slight investigation of its history will correct that false notion. Far from being a theoretical scheme, the offspring of official ingenuity, it was in a measure forced on the Government by the irresistible logic of circumstances. Various alternatives had been previously tried—notably the first and second Banks of the United States, and the system of special deposits of public funds on local banks—but none of them had answered.

It has been objected by the opponents of an independent treasury that none of the alternative measures ever had a fair trial. That is to some extent true. Both the old and the new Banks of the United States got entangled in political controversies which gradually obscured and finally swamped the real banking issue. But apart from these outside complications they had serious defects of their own which might, in the end, have been equally fatal to them.

Both were at times grossly mismanaged, and had more than once to be rescued from critical difficulties. The second bank began business on January 1, 1817, and before it was two years old it nearly ran itself aground. On April 1, 1819, it had only $126,745 in specie to meet $600,000 of notes in circulation, besides which it owed Baring Brothers, its London agents, $900,000, and the Government $500,000. Though President Jackson failed ten years after to prove his too sweeping charges of mismanagement, they were not wholly groundless. And as the Treasury had now large sums of money to answer for, it may have honestly doubted if any existing bank was safe enough to be trusted with them all. On the other hand, it is equally true that he was very unfortunate in the alternative he selected, or rather which he had to submit to as a Hobson's choice, namely, special deposits in the state banks.

This second venture with state bank deposits was even shorter lived than the first, and it ended still more disastrously. Between the expiry of the charter of the second Bank of the United States in March 1836 and the financial panic of 1837, not much more than twelve months elapsed. In that brief period the state banks received from the Treasury over thirty million dollars of ordinary deposits. Nearly as much more came to them indirectly through the distribution that was made to the State Governments

of the accumulated balances from land sales. All this they went through so rapidly, that on the 1st May 1837 specie payments were suspended, and an extra session of Congress had to be called in September. In his message at the opening of this extra session, President Van Buren gave a historical retrospect of the various methods that had been tried of keeping the public money, and came to the conclusion that for the future the Treasury would have to be its own banker. "It is apparent," he said, "that the events of the last few months have greatly augmented the desire, long existing among the people of the United States, to separate the fiscal operations of the Government from those of individuals or corporations."

The issue thus raised by President Van Buren was hotly contested for the next ten years. With brief intervals it was continually before the people, and two presidential campaigns were fought over it before it reached a definite settlement in 1846. Victory inclined alternately to either side, and both sides changed their ground considerably during the progress of the contest.

The Whigs or anti-Jackson party, who afterwards changed their English name for the more American one of Republicans, had been originally opposed to state banks, but little as they liked them, they liked the new Treasury plan still less. The Jackson party, who brought forward the new Treasury scheme, had been originally supporters

of state banks. When a new choice had to be made in 1837 the situation was so different that changes of attitude were inevitable. Three courses lay before Congress: a new central bank, specially organised to do the banking business of the Government; a renewal of deposits in the state banks, or rather an extension of them, as half a dozen depositary banks were still in operation; and a complete financial organisation within the Treasury itself. The last would not have been in itself unpopular but for the "infamous specie clause," as Jackson's edict requiring payment for public lands in gold or silver was still called. Following that much-disputed precedent, the Government bill "for imposing additional duties as depositaries in certain cases on public officers," required public dues to be paid in specie.

This was the point round which the prolonged fight raged most furiously. It may with little exaggeration be said that specie payments were the *bête noire* of the American people at this exciting period of their history. The anti-specie sentiment pervaded all classes from the highest to the lowest. Even those who favoured sound money objected to being dragooned into it by Congress. The Whigs, who at this time were strong advocates of free banking, protested against any kind of official interference with the currency. Daniel Webster denounced the scheme as a step backward "from developed civilised credit to bolts and bars." It was, he declared, a misuse of money

to hoard it in the vaults of the Treasury. "All that the Government should have to do with it is to receive it to-day that it may pay it away to-morrow. It should not receive it before it needs it, and it should part with it as soon as it owes it. To keep it—that is, to detain it, to hold it back from general use, to hoard it—is a conception belonging to barbarous times and barbarous Governments." If Webster's maxim were to be applied to the four hundred million dollars of a cash balance sometimes to be found in the United States Treasury, what degree of barbarism would that represent?

The Van Buren Treasury bill got through the Senate, but was defeated in the House of Representatives. At the regular session, which opened in the following December (1837), it was reintroduced, only to meet the same fate again. Then it seems to have been allowed to rest for a year. In the session 1839-40 it came up a third time, and the perseverance of the President was rewarded with success. The twice-rejected bill scraped through the House by a narrow majority of 17. But the "specie clause" had meanwhile been toned down a little. It was not to come into operation all at once, but only by degrees. From the 30th June 1840 one-fourth of all Government dues was to be paid in specie; a year later another fourth was to be so payable; in the third year three-fourths, and in the fourth year the whole.

This, however, was far from being a final settlement of the self-dependent Treasury question. At the presidential election of 1841 the tables were turned on the Jackson party, to-day known as Democrats. The Whigs won a sweeping victory in the election of General Harrison. As the "specie clause" had been one of the prominent issues in the campaign, the Whigs assumed that they had a mandate to reverse the experiment which had been agreed to by such a narrow majority the year before. The new Secretary of the Treasury, Ewing, reported to the Ways and Means Committee a scheme for a national bank in place of the self-dependent Treasury. Two bills were accordingly introduced—one to repeal the Treasury law of 1840, and the other to create a national bank. Both were passed by Congress, and to the amazement of their friends were vetoed by the President.

Nothing more was done during the Tyler Administration, but in 1845 the political pendulum swung back again to the Jackson side. President Polk took up the matter where Tyler had broken it off. He proposed to Congress "A Plan of an Exchequer" which sounded too English for the Ways and Means Committee. It was scornfully reported against as being modelled "on the institutions of Darius, the King of Persia." Its principles were sarcastically said "to have descended with little modification and slight improvement through all governments where banks

do not exist, and to be found in perfect operation in the island of Cuba. Undismayed and undiscouraged, President Polk returned to the attack in the following session (1846). The subject was literally threshed out in all its bearings—constitutional and financial. The advocates of an independent, or, as it was officially termed, a sub-Treasury, exhausted their opponents, and forced their bill through both Houses. On the 1st August 1846 the sub-Treasury system was formally adopted, and no subsequent attack has succeeded in seriously disturbing it. Its merits, however, have never passed without question, and it is still a more prolific cause of controversy than any other branch of the executive.

While the main issue has to all appearance been definitely settled, a number of secondary issues recur now and again. The most interesting, if not the most important, of these survivals is the perennial conflict between the Treasury and the banks as to their respective spheres and their mutual relations. The banks naturally feel sore at having the Treasury as a competitor instead of as a customer. This exceptional condition handicaps them as compared with European banks where the old, and, as they think, the proper, relation between banks and national treasuries still obtains—namely, that of customers and not of rivals. They may also have some reason to consider that the issue ought not to have been definitely closed during the anti-bank

crusade of the Jackson period. The banking system of that day, with all its faults and abuses, was certainly not a fair criterion of future possibilities. Had there been in 1846 even two or three hundred banks fit to compare with the national banks of the present day, the Jackson crusade might have ended differently. Even Jackson himself might have seen no occasion for it. The shibboleth of state rights might have been excluded from the controversy, and that would also have been a great gain. On this point Professor Kinley offers to the losers in the prolonged contest a very appropriate consolation. His account of the long and vehement controversy, which ended in the passing of President Polk's Treasury law, concludes with the following note on the side issues that had complicated it:—

> The whole constitutional argument against the use of banks by the Government was but a phase of the old doctrine of State Rights and Supremacy, which prevented Congress from assuming such control over the banking system of the country as would have made it safe, would have prevented "wild-cat" banking, would have saved the financial good name of the country, and would have made the sub-Treasury system unnecessary by making the banks as safe for Government as they are to-day.

The victory of the sub-Treasury party was complete, and, as political victors in Congress often do, they pressed it farther than was really necessary. They overlooked no precaution that

could contribute to secure perfect independence of the banks. They stuck at nothing likely to check or neutralise the competition of the banks. Not only were deposits of public funds in banks to be put an end to, but bank-notes were not to be either received or paid on public account. The section defining the functions of the Treasury contained a sweeping enactment that "all public officers of whatsoever character are hereby required to keep safely, *without loaning, using, depositing in banks,* or exchanging for other funds than as allowed by this Act, all the public money collected by them or otherwise placed in their possession and custody till the same is ordered by the proper department or officer of the Government to be transferred or paid out."

The "specie clause" of President Jackson reappeared in a still more drastic form. It required all public dues and disbursements to be made in gold or silver coin or Treasury notes only. This not merely boycotted bank-notes in all Treasury operations, but it put a new form of paper money into circulation to compete with them. The new system was just started when the Mexican war broke out, and in financing it an issue of over twenty million dollars Treasury notes had to be made. The Treasury, being at the time in a very favourable position owing to a sudden development of foreign trade and a large influx of specie from abroad, was able to issue its notes at par, and to maintain them within a fraction of par all through

the war. They were consequently preferred to bank-notes, and drove a large quantity of them out of circulation. This was a very serious grievance with the banks. They suffered from it in both branches of their business—local and exchange. Sub-Treasuries were planted in half a dozen chief cities—New York, Boston, Philadelphia, Charleston, St Louis, and New Orleans. In all these cities the banks lost their Government deposits, and to that extent had to curtail their advances. When their notes were superseded by Treasury notes, still further curtailment was imposed on them.

If the law had been rigidly enforced by all revenue officers, it would have gone hard indeed with the banks. But its Draconian provisions could not be universally applied. Postmasters had to accept any sort of currency that was going, or the postal service would have had to be suspended. But as a rule the Treasury regulations were strict almost to the point of arbitrary severity and red tape. At the outset all Government drafts had to be made payable to order and not to bearer, and they had to be presented within a certain time regulated by the distance of the place of payment from Washington. The payees had to cash them at once in a lump sum. They could not draw them out of the sub-Treasury by instalments. Even transfers of public funds from one officer to another were subject to hard-and-fast rules.

The Treasury, however, found it much easier to make regulations than to carry them out. It was some consolation for the banks that the facilities which might have been given to the public were thus restricted, inasmuch as it lightened the pressure of Treasury competition on them. Subsequently most of these hard-and-fast rules were relaxed, and of late years the tendency has been somewhat in the opposite direction. At the outset the sub-Treasuries were also hampered by the slowness of Congress to vote the necessary funds for proper equipment for them. Not for years after they had been established were they provided with vaults and other requisites for the safe custody of public monies. Revenue officers in the smaller towns were still worse off, for they had to keep large sums wherever they could store them. Safes and strong-rooms had not yet been invented, though they followed soon, thanks perhaps to the "specie clause" in the sub-Treasury law of 1846.

If the new system gave a severe shock to the banks when it was first introduced, it was good for them in the long-run. When they no longer had Government deposits to make an easy living out of, they pulled themselves together and concentrated their energies on what was, after all, their proper business—commercial banking. Two new factors arrived to fill the void caused by the withdrawal of Government deposits. Railroad building was started in the Middle States, and

soon a growing tide of agricultural settlement began to flow westward. British capital poured in along with British immigrants and British goods. From 1849 onward a domestic supply of gold was superadded to the influx of foreign capital. The combined effect of these new factors was a decade of financial and commercial prosperity greater than any that the country had ever before enjoyed. While it lasted neither the Treasury nor the banks were subjected to a real test of strength.

But the test came in 1857, when the boom was exploded by a financial panic. It is only fair to the banks to say that they emerged from this ordeal with greater credit than the Treasury did. The latter was never more feebly administered than during the four years from the panic of 1857 to the outbreak of the Civil War. Consequently it could not have been worse prepared than it was for the terrible financial strain which the war suddenly threw upon it. Had it in that emergency been left to its own resources it must of a certainty have broken down. A financial collapse was averted only by the bold and public-spirited action of the Eastern banks, especially those of New York, Boston, and Philadelphia. History records nothing more magnanimous in its way than the promptitude with which these banks rallied round the Treasury in the hour of its direst need. They placed themselves and all their resources unreservedly at the service of the

Government. The desperate situation at the opening of the war was thus described by the Loan Committee of the Associated Banks of New York in its report of June 12, 1862:—

> The credit of the Government had become impaired to such a degree that a large loan could not be obtained in any ordinary way, nor even a small temporary loan except for a very short period at a high rate of interest. Men's hearts failed them: the rebellion was on so large a scale, and had broken out so unexpectedly and raged so furiously, that to subdue it seemed to most persons to be impossible. Then it was after careful deliberation and consultation with the Secretary that the banks decided it to be wise for them to depart from their usual legitimate business *and sustain the Government and stand or fall with it.*

The banks did not at the time consider that their patriotic action was adequately appreciated or responded to by Secretary Chase. In offering him three successive loans of fifty million dollars each, they not unnaturally assumed that he would make it as easy as possible for them to carry through the hazardous operation. Their idea was that public subscriptions should be invited for the loans, that the subscriptions should be paid into the associated banks and checked out by the Government for current expenses. This method offered several important advantages which were offset by one serious drawback. It would have carried through the loan operations with a minimum expansion of paper currency and a minimum

disturbance of ordinary business. It would have given the banks effective control over the stock of gold in the country, most of which, by the way, happened to be in their vaults. By controlling the stock of gold the banks would have been able to maintain the convertibility of their note issues, and to avert, or at least stave off as long as possible, the greatest of all impending dangers—a forced suspension of specie payments. With this view they had pooled all their gold reserves and made up the very considerable aggregate of forty-seven million dollars.

Altogether it was a well-thought-out and business-like programme that the associated banks submitted to Secretary Chase in August 1861, when he called for their assistance. It is no great reflection on him, or any great compliment to them, to say that he would have fared better had he followed it instead of experimenting with crude plans of his own. But a legal obstacle stood in his way. Between the Treasury and the banks there were still the two stumbling-blocks that had divided them in 1812 and again in 1846—the Government deposits and the "specie clause" in the Treasury law. Congress passed a special law (August 5, 1861) to allow "the Secretary of the Treasury to deposit any of the monies obtained on any of the loans now authorised by law to the credit of the Treasurer of the United States in such solvent specie-paying banks as he may select."

This was satisfactory enough so far as the question of deposits went, but differences arose between the Secretary and the banks as to whether or not the deposits should be repayable in specie or in bank-notes. The banks claimed that repayment in bank-notes was implied in the general authority given to the Secretary to deposit with them. Mr Chase, however, insisted on a literal interpretation of the law, and repayment in bank-notes not having been expressly authorised by it, he held that the old rule requiring all payments to or by the Treasury to be made in specie must still be enforced. In the circumstances this was impossible, and the effect of his insistence on specie payments from the banks was that all specie payments had soon to be suspended.[1] This result was accelerated by another step which Secretary Chase took against the earnest advice of the associated banks. He had obtained two Acts of Congress (July 17 and August 5, 1861) authorising him to borrow 250 million dollars in either of the following forms—

1. Twenty-year Treasury notes at 6 per cent.
2. Three-year " " at $7\frac{3}{10}$ "

He was also empowered to issue 50 million dollars of demand notes bearing no interest, but receivable for all public dues and taxes. Not only did the associated banks object to these, but the railroads refused them, and they were reluctantly

[1] December 31, 1861.

accepted by merchants and shopkeepers. The chief means of issuing them was to pay the salaries of Government employees with them. Even before he could do this he and the chief officers of the Treasury had to sign a paper agreeing to accept them in payment of their own salaries. The demand notes, though not issued in extravagant quantities, soon produced the evil effect on the gold reserves which the associated banks had foreseen. Gold rapidly disappeared, and the country suddenly found itself on a paper basis. There was now no help for it but to struggle through with any and every kind of paper money that could be put in circulation.

Undoubtedly the least creditable episode in the sixty years' history of the United States Treasury was Secretary Chase's financing of the Civil War. He tried ten different methods of raising money, some of which could not fail to clash with each other. During the war he piled up a national debt of 2846 million dollars, or 570 millions sterling, of which little more than one-third was funded. The other two-thirds was made up of legal tender notes (greenbacks), Treasury notes, compound interest notes, and temporary loans, making a huge floating debt of 1733 million dollars, or 347 millions sterling. The funded debt at the same period was only 1109 million dollars, or 222 millions sterling, —an obviously small proportion of the whole,

May we, without offence to American susceptibilities, suggest a comparison between these figures and the financing of the Japanese war?

But the United States Treasury has long outlived its Civil War finance. Latterly it has been as much distinguished by its plethoric cash balances as it was in 1861-65 by its tremendous debt. It has no longer to call on the national banks for support. Not unfrequently it has to come to their help, and that policy may also be open to question. During the past twenty years its net cash assets (coin, bullion, and paper money) have frequently exceeded 300 million dollars, and have seldom fallen below 140 million dollars. It has, besides, special deposits in national banks, which in December 1903 reached a maximum of 159 million dollars. At the close of the past financial year (June 30, 1906), on the eve of the 30-million dollar loan for the Panama Canal, there was a comfortable balance on hand of 328 million dollars.

If the "independent" Treasury was seen at its worst during the crisis of the Civil War, it has been seen at its best in the past seven or eight years of record prosperity. Not only did it then surmount all the difficulties imposed on it by previous weak management, and still more by mischievous legislation, but it acquired a financial strength which has no parallel in the history of nations. The only ground on which adverse critics can now reproach it is that it

has become too strong. True, such gigantic operations as it carries on must now and then clash with the ordinary movements of trade, but all rich countries are liable to similar inconvenience. The complaints that are frequently made in New York, about money being locked up in the Treasury when it is urgently needed in business channels, are often echoed from London and Berlin.

The collection of taxes to the amount of a hundred millions sterling a-year or more must at times disturb markets a good deal, especially markets like those of the United States, which are most of the time working at high-pressure. The disbursement of proportionately large expenditures may also now and then let loose too much money. But what are such temporary grievances compared with the national advantage of having a tower of financial strength standing outside the whirlpool of speculation, ready to stay the storm and to shelter the shipwrecked? In their next commercial crisis, which may not be so far off as it seems, the Americans are likely to learn the value of having a power behind their banks greater than the banks themselves, and free from their almost irresistible temptations to be too venturesome.

BOOK III.

ITS CREATIVE POWERS

BOOK III.—ITS CREATIVE POWERS.

CHAPTER XII.

PRODUCTION.

In Europe the working man still considers himself the sole wealth-producer, but when he crosses the Atlantic he soon discovers his mistake. There he finds himself no longer the bully of a worried and nervous employer, but a small wheel in a very big machine. Wherever he goes and whatever kind of work he takes to, he is surrounded by an industrial organisation which relentlessly demands the maximum of result for the minimum of effort. To use his own language, the industrial machine compels him to "give a fair day's work for a fair day's pay." This disagreeable peculiarity renders American industrial methods very unpopular among English trade unionists.

American employers pay the highest wages, but they take care to get the highest return for them. And what enables them to do so? Partly the close attention which they give to their business, and their personal knowledge of

all its details. Partly the superior organisation of all American industries, and the financial facilities they enjoy. Business-like finance is their strongest and most valuable gift. This is not limited to the gigantic trusts and combinations which command millions of dollars of capital. It extends to the primitive work of the farm and the cattle-range. When we read about the rapid extension of settlement in the North-West, does it ever occur to us that there must be some special machinery at work on it? We hear almost incredible stories of immigrants rushing into a new district in the early spring, buying land, and raising a big crop of wheat on it the same year. Such things would be impossible in England, even if we had a boundless prairie to operate on. What renders them not only possible but easy in the North-West? It is the fact that wheat-growing, like most other industries in the North-West, has been reduced to a science. The single-handed, slow-witted farm-labourer of the old world has been superseded by outfits of steam-ploughs, cultivators, reapers, and threshers. In the newest prairie colony these implements can be all bought or hired. Or the owners of them will undertake to do any kind of agricultural work by contract. They will break up new land for so much per acre. They will plough it, seed it, and harvest it in the same way. A new settler may have everything done for him at fixed rates, from the building of his shack to the storage of his crop in the local elevator. Naturally, he gets much

more done in his first year by this method than he could do for himself in two or three years. If he has the necessary capital it may be cheaper for him to farm by contract than to take his chance of casual labour. So it might be cheaper for the British farmer to sublet his work, if there were contractors ready to undertake it, as in the North-West. Methods which operate so successfully on the outskirts of civilisation might well deserve a trial in Norfolk or Essex.

Whether or not they be suited for universal application, their success in the United States is unquestionable. They are among the latest examples of how industry can be stimulated and promoted by intelligent finance. Scientific farming, like scientific manufacturing and scientific production generally, is a matter of organisation, and all effective organisation begins with good finance. It is only in the rudimentary branches of industry that labour can still claim to be the chief wealth-producer. In the higher and more complex branches one expert financier may be worth a dozen figurehead capitalists and thousands of eight hours a-day workmen. Everywhere, except of course in politics, brain is getting the upper hand of muscle. It is the real creative force in production, and skilful finance is one of its most active forms.

The productive energy of the Americans is more due to brain than to muscle, though it exhibits far more than the average amount of both. From its birth the United States has been a strenuous and

versatile producer. When it was still known as "Our American Plantations," and the 'Wealth of Nations' had not yet been published, it realised Adam Smith's ideal of national prosperity where production keeps well ahead of consumption. The Plantations shipped large and increasing quantities of produce to the West India islands, much of which was paid for in Spanish dollars, and the rest by imports from London, Glasgow, and Bristol.

Independence naturally gave a great impetus to North American trade. Its progress was slow at first, having been checked by physical obstacles which were difficult to overcome. The thirteen states occupied a mere fringe of the Atlantic seaboard, which was sharply cut off from the interior by the Alleghany Mountains, a barrier that defied the strenuous efforts of a whole generation of American engineers. They planned roads, canals, and railways to cross it, but they had many a hard struggle with stream and mountain. It was not difficult to reach the foot-hills of the Alleghanies, but when it came to scaling ranges 1500 to 2000 feet high, a costly battle had to be fought over every inch of the road.

When George Stephenson was busy on his first big railway—the Manchester to Liverpool—Charles Carroll, the last survivor of the signers of the Declaration of Independence, was turning the first sod of the Baltimore and Ohio railway. Its objective point was Pittsburg, the old Fort Duquesne of French Canadian days, which, when

it came under the British flag, was rechristened by the Americans—who had helped to take it—after their own particular hero, the elder Pitt. The Baltimore and Ohio, following the farthest south of the five passes through the Alleghanies, got across in 1842. The other four passes were subsequently occupied by the Pennsylvania Railroad, the Philadelphia and Erie, the Erie, and the New York Central.

The scaling of the Alleghanies by steam roads threw open to settlement the whole of the Middle West as far as Kansas. That first generation of settlers must have worked with a will, if they are to be judged by the fabulous quantities of produce they sent east over the new railways. In 1870 the ten interior states, from Ohio to Kansas and Nebraska inclusive, contained 13,000,000 of inhabitants, of whom 2,000,000 were engaged in agriculture. They raised in that year 812 million bushels of cereals, 228 million pounds of butter and cheese, and 208 million dollars worth of cattle. In the thirty years from 1840 to 1870 their production of cereals increased fivefold, of butter and cheese elevenfold, and of meat nearly ninefold. During these thirty years the New England states were almost stationary. All the growth worth speaking of in the country took place west of the Alleghanies, in the great valleys of the Ohio and the Mississippi.

The Civil War caused a loss greater than its actual cost by the check it gave to the de-

velopment of the West. That movement was delayed at least ten years, and it did not resume its full force till 1870. Then a second period of expansion began beside which the first sinks into insignificance. Unlike its predecessors, it enjoyed every conceivable advantage. Europe furnished, without stint, labour and capital. The war furnished bold leaders and capable workers. Free trade England threw open all her markets to American produce, and, being prosperous herself, she was able to pay high prices for all she bought. Land, labour, cheap transportation, good prices, and unlimited demand delighted the heart of the Western farmer. It was even more profitable to the industries dependent on him. Manufacturers, merchants, bankers, carriers, all shared with him in the latest American millennium.

Up to 1830 the United States had not been much more than self-supporting. The first thirty years of the nineteenth century was not, in any respect, a very expansive period. Population increased slowly, while the exports hardly progressed at all. The country simply moved along as it had done in the days of the Plantations. The magic touch of scientific finance was needed to give it a fresh impetus. The exports did not even keep pace with the growth of population, suggesting a positive decline in the rate of production. In 1800 they were officially valued at close on 71 million dollars, equal to

$13·37 per capita. In 1810 they had receded to 66¾ million dollars, or $9·22 per capita. In 1870 their total was 69½ million dollars, but the average per head had fallen to $7·22. In 1830 they had got back to the level of thirty years before—71½ million dollars,—but the average per head of population had declined to $5·57. This is to be specially noted as the smallest per capita average recorded for American exports.

The year 1840 presents itself as the starting-point of a new era in American production, the causes of which are not far to seek. Railways and foreign capital were now both at work on the situation. Exports show the first of those sensational advances which distinguished later decades. They jumped from 71½ million dollars in 1830 to 123½ millions in 1840. From this time onward to the end of the century their decennial strides were to be gigantic:—

A.—UNITED STATES EXPORTS.

	Total.	Per capita.
1840	$123,668,932	$7·25
1850	144,375,726	6·23
1860	333,576,057	10·61
1870	392,771,768	9·77 *
1880	835,638,658	16·43
1890	857,828,684	13·50
1900	1394,483,082	17·96
1904	1451,355,645	17·70
1905	1518,561,000	17·94

* Domestic exports only after 1860.

The staple exports have, of course, always been agricultural, and, though their percentage of the whole has greatly declined in the past twenty years, it has never fallen under two-thirds. Conversely, manufactured exports have never risen above one-third, though that is a tremendous advance on the merely nominal proportion they held in 1840. An eloquent contrast between agricultural and manufactured exports will be seen in these figures:—

B.—UNITED STATES EXPORTS.

	Agricultural.	Manufactured.
1840	$92,548,067	$11,149,621
1850	108,605,713	17,580,456
1860	256,560,972	40,345,982
1870	361,188,483	68,279,764
1880	685,961,091	102,856,015
1890	629,820,808	151,102,376
1900	835,858,123	433,851,756
1904	853,685,367	452,445,629
1905	820,863,000	543,608,000

Two points challenge attention in these parallel columns. One is the much more rapid growth of manufactured than of agricultural exports. The other is the marked increase which both classes of exports exhibit in the decade 1890-1900. Did some new factor or factors come into play then to account for these remarkable advances of 206 million dollars in agricultural exports, and 282 million dollars in manufactured exports? It is at

least an *a priori* probability. If some new factor or factors came into play then, what were they, and how long is their influence likely to continue? It may make the greatest possible difference, both to American producers and European consumers, if these factors prove to be temporary or permanent, exceptional or general.

But let us not forget that exports are at best only an indirect measure of production. As regards the staple products of the United States more direct tests are available. For a dozen of these we have official estimates of the output year by year—namely, coal, pig-iron, steel, tin-plates, copper, petroleum, wool, wheat, corn, cotton, cane-sugar, and the precious metals. Below we have tabulated the totals given for the beginning, middle, and end of the sixty-year period under examination (1840-1900):—

C.—STAPLE PRODUCTS OF THE UNITED STATES, 1840, 1870, 1900.

	1840.	1870.	1900.
Coal (tons)	864,379	32,863,000	240,788,238
Pig-iron (tons)	286,903	1,665,179	13,789,242
Steel (tons)	...	68,750	10,188,329
Tin-plates (lb.)	...	...	677,969,600
Copper (tons)	...	12,600	270,588
Petroleum (galls.)	...	220,951,290	2661,233,568
Wool (lb.)	35,802,114	162,000,000	288,636,621
Wheat (bushels)	84,823,272	235,884,700	522,229,505
Corn (bushels)	377,531,875	1094,255,000	2105,102,516
Cotton (bales)	2,177,835	3,114,592	9,436,416
Cane-sugar (tons)	69,246	46,800	149,191
Gold ($)	11,697,829	50,000,000	79,171,000
Silver ($)	...	16,000,000	74,533,495

Sixty years ago the coal and iron industries of the United States were yet unborn. They were waiting for the Alleghany Mountains to be spanned, and an outlet to be opened for them from the mineral fields of Pennsylvania to the Atlantic seaboard. Thirty years ago the coal-fields had entered on their long struggle with engineering and financial difficulties. A heart-breaking succession of bankruptcies and reorganisations lay before them, but they have lived through it all and come out triumphant. To-day coal is not only a great but a prosperous industry. Thirty years ago iron and steel were getting into shape, but their output was still insignificant. It was the two last decades of the century that brought them to the front, and then they came with a rush. Between 1880 and 1900 the production of pig-iron more than quadrupled, and that of steel multiplied fully eightfold. Tin-plates, as an American industry, were a creation of the M'Kinley tariff. Like Jonah's gourd they shot up almost in a night. In 1890 their registered output was under 2¼ million lb., and in 1900 it was close on 678 million lb. In all these mineral industries scientific finance was one of the stimulating factors. The new generation of Pennsylvania ironmasters were financiers as well.

If a still more wonderful illustration be desired of the creative power of modern finance, the history of American copper will furnish it. Half a century ago the copper-mines of the United

States were few and insignificant. The first record to be found of copper production is 100 tons in the year 1845. At that time the total output of the world was about 40,000 tons a-year. The United States was dependent for its copper on Cornwall and Chili. Not for another forty years could it supply its own needs. Now it heads the list of copper producers, and has absolute control of the market. It possesses half a dozen of the largest and richest copper-mines ever opened. One of these produced nearly as much copper as all the mines in the world did half a century ago. In this same half century the world's total output of copper has increased fully twelvefold. Stranger still, a ready market has been found for the enormously increased supply.

At both ends of the copper industry may be seen the far-reaching influence of scientific finance. Without it neither could these gigantic mines—some of them with ten thousand employees—have been opened up and properly equipped, nor could markets have been found for their output. Their best customer of late years has been the electrical industry—another creation of modern finance. As a further illustration, we find the most powerful and best managed of industrial organisations—the Standard Oil Company—based on a product which has not been much more than forty years in general use. The first official record of petroleum is 84,000 gallons in 1859. Next year the output jumped up to 21,000,000 gallons. In the follow-

ing decade it increased more than tenfold, and by the end of the century it was one hundred and twenty-seven times as large as it had been in 1860. Skilful finance did a great deal for petroleum, and it may seem to the Standard Oil people that poetic justice requires them to do all they can for finance.

Agricultural production is by its nature farther removed from financial influence than mining and iron-working. It cannot be forced as they can, and its progress is consequently less sensational. Few of the agricultural increases of the past sixty years compare with those of mineral products. Wheat has multiplied sixfold since 1840, corn nearly as much, wool eightfold, but cotton little more than fourfold, and sugar only twofold. There is nothing very remarkable in figures like these. Other new cereal-growing countries can beat them easily—Argentina, for instance, and Russia. Nor is the American record in respect of the precious metals extraordinary. Between 1870 and 1900 the gold output gained only 58 per cent, which is modest, indeed, compared with the rapid developments recently seen on the Rand and in Western Australia. The silver boom which opened with such brilliant promise set in disaster and disappointment. The quick fortunes made out of the Comstock and other pioneer mines would probably not cover the losses that have been sustained since the boom collapsed.

Reference has been made to the wonderful ex-

pansion of American exports in the last decade of the nineteenth century. It was paralleled, and even exceeded, by the expansion which took place in the staple products of the country. It was also paralleled by the tremendous rebound of the railroads from the severe depression they had suffered in 1893. And two more remarkable parallels will be found for it in banking and general business. The "M'Kinley boom," as it was called, was the most comprehensive and many-sided movement that even American history records. In extent, as well as in intensity, it made the closing years of the century memorable in American economics generally.

Up to 1890 economic problems had been comparatively simple in the United States. Hitherto the industrial system of the Old World and the New had fitted fairly well into each other, and their fiscal policies had worked with comparatively little friction. America was still content with its historical *rôle* as producer of food and raw materials for Europe, while Europe still retained the lion's share of the manufacturing trade of the world. The first sign of a serious break in this Cobdenite ideal of international trade was the so-called "American invasion" of Europe in 1898-99. The causes of that sudden and startling development have yet to be thoroughly investigated and set forth. Only a few of the most obvious can be enumerated at present. They were:—

On the American side—

1. The collapse of 1893, which reduced all classes of securities to breaking-up values, and transferred the bulk of them from very weak to very strong hands.
2. The railroad reorganisations of 1895-96, which gave a fresh start to over seventy large systems, and, by cutting down their fixed charges to the bone, left room for a magical appreciation of their securities as soon as good times returned.
3. A series of splendid cereal crops coincident with high prices and good markets in Europe.
4. The development of several new mineral fields, notably those of Alabama and Lake Superior.
5. The complete restoration of business confidence, which followed the stoppage of silver purchases in 1893, and the signal defeat of Bryanism in 1896.

On the European side—

1. The Boer War, which taxed all the industrial as well as the financial resources of Great Britain.
2. A series of bad harvests, causing short supplies of food and high prices.
3. A period of dear money, which not only caused great depreciation of securities, but discouraged all kinds of enterprise.

Each of these causes, and especially those on the American side, are, it will be observed, more or less closely connected with finance. Some of them are obviously temporary, and several have already run their course. But the others must be regarded as permanent, or at least as likely to endure for many years. The most formidable of all are the mineral fields of Alabama and Lake Superior. Their possible effect on the industrial future, not of the United States alone but of the civilised world, has not even yet begun to be realised. They are indeed an important landmark in history. The rare honour has fallen to three states in the Union of forming special centres of energy and growth. Pennsylvania in the east, Alabama in the south, and Minnesota in the north-west, have each in succession given the country a fresh impetus. By laying open new sources of iron, combined in Pennsylvania and Alabama with immense coal-beds, they have proportionately increased the motive power that drives the national industries.

Next to food, motive power is the most valuable of human possessions. The effect of new discoveries of power is necessarily much greater than that of new supplies of food. The latter come slowly and regularly, whereas natural sources of power like coal and iron are generally discovered in vast quantities. Hence the great and immediate effect of such discoveries. A new iron or copper mine may do more for a country

in a single year than the spread of agricultural settlement can do in a quarter of a century. After crediting to the bumper harvests of 1897-99 the reorganised railways and the defeat of Bryanism, —all that can be fairly claimed for them in the M'Kinley boom,—the largest share will still be due to the new coal, iron, and copper supplies that were opened up then. Under any circumstances their effect would have been far-reaching; but it has been greatly enhanced by the rare skill with which they were exploited, and the gigantic scale on which they were financed.

The United States has entered on its iron or rather on its metallic age, for copper is to play almost as conspicuous a part in its industrial future as iron or steel. The crucial question with regard to its minerals and all its other staple products is how long they may enable it to maintain the position of a surplus producer. There are two natural and irresistible forces continually operating to shorten that period. One is the home demand for home-grown food, and the other is the increasing capacity of the people to work up their raw materials at home. If there were no special causes in operation, no fiscal or other policy in question, the mere growth of the population would be continually trenching on the exportable surplus of food and raw materials.

In some directions there are premonitory symptoms of that process having already begun. In a few it seems to have made considerable progress.

In all or nearly all it is within the range of practical economics. The upward bound of United States exports, which so frightened Europe a few years ago, has broken its head against the clouds, and is going downhill again. That in itself would be of small moment, for another rebound may come along any day. What is really significant is the gradual decrease in the exportable surplus shown by many of the staple products. For our present standpoint it matters little what the special causes of decrease may be. Whether it be, as in the case of food, diminishing crops or increasing home consumption, and as in the case of raw materials, failing supplies or the extension of home manufactures, does not affect the main question. The exportable surplus may still look large and yet be shrinking relatively. The right test for it is the proportion it bears to the total output. If that be declining there is need to look for an explanation. When we begin to make such comparisons, one thing may surprise us greatly at the outset, and that is how very small a portion the exportable surplus generally is of the total product.

The British public console themselves nowadays for the backwardness of their foreign trade with the reflection that, after all, their home markets are far more important than foreign ones. They have no definite idea of the relative magnitude of the two, and will not take the trouble to find out until they are frightened into

it by an industrial crisis. But what is still mere hearsay in England is statistical fact in the United States. All the necessary data are available for exact comparison of the home and foreign branches of American industry. The statement, therefore, may be not only made but proved with regard to most of the raw products of the United States, that only a small percentage of the total product goes abroad in its raw state. Further, it may be affirmed as to some of the largest of them that the percentage exported is gradually declining.

The bearing of these two facts on the relations between American industry and finance is too obvious to need pointing out. The higher a country rises above the agricultural into the manufacturing stage of industry, the more complex a system of finance it must need. Strange to say, it is hardly a quarter of a century since the agricultural exports of the United States were at their highest relative point, and the manufactured exports at their lowest point. In 1880 the respective ratios were—agricultural 83·25 per cent and manufactured 12·48 per cent. In 1900 they had changed to—agricultural 60·98 per cent and manufactured 31·65 per cent. The two classes had, however, one significant feature in common—the declining ratio of exportable surplus to total product. This paradox holds good, even of iron and steel, the banner industries of the M'Kinley boom.

Exportation of American staples on a large scale dates only from 1870. The exports of to-day form as a rule a larger percentage of the total product than it did, or could have done then, though even this rule is not without marked exceptions. The share of the cotton crop exported is relatively smaller than it was thirty years ago: in 1870 it was over 70 per cent, and in 1900 it was only 65·18 per cent. A similar decline has taken place in the petroleum exports. In 1878 they amounted to 72·67 per cent of the total production as compared with 45·13 per cent in 1900. But, generally speaking, the export ratio of staple products is larger than it was in 1870, though in the interval it has been much smaller than it is now. A great expansion of it is noticeable at the beginning of the last decade; but for the past three or four years (1900-1905) it has again shown a falling tendency.

Almost any of the principal items in the above Table C will illustrate these fluctuations. In 1876, out of a total output of 27 million tons of coal, less than 1 per cent was exported. So recently as 1898 the quantity exported was only 2 per cent of the whole, and in 1904 it was only a shade over 3 per cent (3·04). Here there is no comparison whatever between the home and the foreign markets. As to pig-iron, the United States was in 1870 an importer rather than an exporter, though it did both on a very small scale. In 1900 it was both absolutely and relatively a

much smaller exporter than it had been thirty years before. All but 157 tons of the 13½ million tons produced in the latter year was manufactured at home.

Steel and iron statistics were not completely separated till well on in the eighties, and their being mixed up renders any comparison difficult. The output of raw steel is not recorded till 1882, when it was returned at 1,736,692 tons. From now onward there was a rapid advance to over 10 million tons in 1900. In both years the whole product seems to have been manufactured at home. Iron and steel railroad bars produced in 1870 totalled 553,000 tons, of which only 30,000 tons was steel. Nearly as much (456,000 tons) was imported, making a total supply for the year of fully a million tons. Only 1341 tons was exported, including both home and foreign. In 1900 the corresponding figures were 2,271,000 tons produced, 2487 tons imported, 347,800 tons exported, and 1,925,790 tons manufactured at home.

The preponderance of the home market over the foreign is always emphatic. In iron ore, pig-iron, manufactured iron, steel, and tin-plates, the home consumer is insatiable, and leaves little or nothing for export. Copper is the only metal which the Americans appear to produce largely in excess of their own industrial needs. Pig-iron they can never, it seems, have too much of. Even when the annual output runs up over twenty million tons they export very little, and that is

largely offset by imports. Only in four years out of the twelve, from 1890 to 1901, did the exports exceed the imports, and then the largest excess was under a quarter million tons. Nor can the explanation be offered that the pig-iron is held back in order to export it in the higher forms of manufactured iron and steel. The latter in their turn are all consumed at home to within 1½ or 2 per cent of their total output. In 1901, out of 13½ million tons of steel produced, all but 630,000 tons passed into home consumption. In 1902, out of nearly 15 million tons, little more than 300,000 tons went abroad.

The tin-plate industry in the United States offers a very remarkable example of what can be done with a definite policy resolutely carried out. Up to 1891 the Americans received practically the whole of their tin-plates from Europe, chiefly from South Wales. The total imports of that year were 1036 million lb. Next year, 1892, the home manufacture started with an output of 13½ million lb. In 1900 the imports had diminished to under 150 million lb., while the home production had increased to 678 million lb. In 1901 the imports declined further to 118 million lb., and at their present rate of contraction they may soon die out. Tin-plate making has become a purely domestic industry, with very small imports and practically no exports. In this department the Americans seem to aim at being simply self-supporting. They do not as yet

trouble themselves much about foreign trade either out or in.

If we limit our view to mere volume of production, American industries made indeed a brave show at the opening of the present century. Their development in the preceding sixty years had been marvellous, and in the last two of these six decades it had been almost unparalleled. But the profit-and-loss side of the question has yet to be studied. On the whole, American production during these sixty years had been profitable. At some periods, when prices were exceptionally high and foreign demand strong, large profits had been made. The United States has been perhaps the most fortunate of all the food- and raw-material-producing countries. Deservedly so too, for it has been the most strenuous and energetic. But exceptional advantages are as a rule transient. They are produced by some special cause or causes, and when they cease the advantages die out with them.

One of the most practical questions of the day in American finance is whether or not the huge production of recent years is as profitable to the nation as was the smaller volume of fifteen or twenty years ago. Since Morgan finance came in, the whole industrial organisation of the country has been changed to suit it. Capitalisation, fixed charges, labour, establishment expenses, and every detail of administration, have been worked up to a level that twenty or even ten years ago would

have seemed to demand impossibly large profits simply to keep them alive. Such profits can only be earned in exceptional seasons, and every good season may have to reckon with one or two bad ones. The youngest and most gigantic of the millionaire combines—the Steel Trust—has in its brief career already experienced two booms and as many sharp reactions. When we strike a balance between its ups and downs, what remains for the public? Is it more or less than the iron and steel trades might have earned under the old and much less expensive conditions?

If we go through all the staple industries of the United States—agriculture, mining, metallurgy, engineering, textiles, &c.—and put a similar question to them, an equally dubious answer may be forthcoming. It by no means follows that profits have risen as rapidly as the capital, or the output, or the working expenses. In one or two important cases the evidence points the other way. Look at the cotton trade, for example. Now that Lancashire, Germany, New England, the Southern States, Mexico, India, China, and Japan are all scrambling for it, its financial results cannot in average years be very lucrative. Worse still, their tendency must be rather downward than upward.

BOOK III.—ITS CREATIVE POWERS.

CHAPTER XIII.

TRANSPORTATION.

EUROPEAN economists generally treat transportation as a mere distributive process, but in the United States it has a much wider significance. It is not a simple extension of the power of producers, or a cheapening of products to consumers. It does more than multiply markets according to Old World ideas. Transportation in the United States is a great financial interest with a sphere of its own. It is not dependent either on producers or on traders or on politicians. It has, in fact, become too strong for any of these,—perhaps for all of them put together. One of the most vital issues now pending in the Republic is, whether it is to control the railroads or be controlled by them.

American railroads could not avoid becoming one of the strongest, if not the very strongest, interest in the commonwealth. They cover such an enormous area; they operate on such a gigantic scale; so many people are financially

interested in their success, that their influence is of necessity hardly inferior to that of the Government itself. An industry with 11,500 million dollars invested in it, which earns nearly 2000 million dollars a-year gross, and spends over 800 million dollars a-year in wages and salaries, cannot but be conscious of its own strength. With an army of over 900,000 men in its employment, and another army of several hundred thousand holders of its securities, it has both labour and capital at its back.

How this vast power has been actually used by its controllers is a question into which we need not here enter minutely. It is only with the general conditions and not the working details of the industry that we have to concern ourselves. It goes without saying that so gigantic an interest, in order to be efficiently handled, must have administrators of rare ability and enterprise. Whatever faults may be found with American railroad management, it has never lacked either courage or energy. On the contrary, no industry, old or new, has produced such a remarkable succession of strenuous and far-sighted leaders. Thanks to them, railroading has always been a pioneer industry in the Great West. Instead of crawling cautiously after settlement, it has boldly led the way. And the boldest pioneers have, as a rule, reaped the richest rewards.

Railroad builders have never in the history of the world had such brilliant opportunities as the

Great West offered to them in the lifetime of the present generation. It may be doubted if they will ever have such chances again. The railroad pioneer had the ball at his feet, not only in his own business, but in half a dozen others. In opening up a new country he had the first call of its agricultural and mining wealth, as well as of its commercial possibilities. He could become its chief landowner, mineowner, merchant, and banker,—a very different position from that of an English railway director with his weekly board meeting and his modest fees.

In order to appreciate the peculiar importance of the transportation interest in America, we must remember that it has been in the highest sense creative. It has not only developed and built up districts already settled, but it has promoted new settlements. Its richest territory is generally of its own making. In such virgin areas it has to take wide views of its functions. In order to get traffic enough to live upon, it has to bear a hand in everything that is going on. By turns it has to be producer, trader, and banker, as well as transporter. Our legal definition of a railway as a public carrier has been adopted by the Americans, but they give it a good deal of latitude in practice. In their view the public carrier cannot wait for business to come to him: when it does not come he must go after it. And when there is not enough in sight he must stimulate new sources of supply.

Hence the most distinctive peculiarity of American transportation, that it stands very close to production,—so close at times as to overlap it. Coal and iron mining, for example, are little more than transportation of material from one place to another. The coal and iron are substantially the same when they reach the furnace as when they left the mine. Lumbering is another industry which owes nearly everything to transportation. The felling of the tree is a matter of a few minutes' work, but the marketing of it may involve a long series of handlings, together with a haulage of several thousand miles. Ninety per cent of its final cost may be due to transportation. Moreover, a margin of 5 per cent in cost of transportation may be all that stands between millions of feet of growing timber and a possible market—just as the opening up of a new wheat country may depend on a cent or two per bushel of railway rate.

The favourite maxim of the British railway manager that rates should be "what the traffic will bear" is a pious opinion with the American manager also, but he has another maxim that considerably qualifies it. It is that the "freight must be moved." When the shipper and the traffic agent are sparring over a rate, it is always understood between them that the goods have got to go somehow. There is never any question of letting them lie where they are. Professor W. D. Taylor, of the University of Wisconsin,

in replying to the charge that there is no system in the making of railroad freight rates, says: "There is a law upon which they are constructed that every traffic-man from Maine to San Francisco knows must be observed—rates must move the freight, and if possible must move it in increasing quantities." Every traffic-man from Maine to San Francisco knows, further, that there are only two ways of getting freight for his road in increasing quantities. One is to capture it from his competitors, and the other is to develop new business.

The first was the old style, suited only to the barbaric age of railroading. The second is the new style, which is rapidly superseding the old one. The railroad manager of the present day thinks much more of creating new traffic than of filching traffic from his neighbours. Of course human nature is not yet perfect, even in the traffic departments of American railroads, but it is due to them to remember that the greatest railroad triumphs of the past ten years have been achieved in the opening up of new territory rather than in scrambling for the business of old territories. A fresh fit of pioneering is now on, both in the south-west and north-west. At least seven thousand miles of new road are being built this summer (1906) on the Pacific coast, especially in Washington, Oregon, and British Columbia. California too will have large additions made to its mileage.

If these new roads were built on the European plan—laid down and left to take care of themselves—they might soon be streaks of rust on the prairie. But the American railroad pioneer not only builds roads,—he feeds them and creates traffic for them. He is public-spirited as well as far-sighted, and whatever minor grievances the people may have against him, they always recognise his devotion to the general good. He, on his side, identifies himself with all local interests, and regards their prosperity as the greatest possible compliment to himself and his road. Not being shackled by cast-iron rules and tariffs, he can make special concessions when needed.

The strongest argument brought against the Bill lately passed by Congress, to confer on the Inter-state Commerce Commission the power to fix rates, was that under it managers would no longer have a free hand to grant low rates for emergency traffic. They would, it was said, have to give up what has hitherto been one of their most useful privileges—that of assisting to open up new markets and to extend old ones. As examples of this it was alleged that—

From Michigan to Louisiana and from Texas to Oregon, the rates of the railroads have been so adjusted to the needs of the shippers of lumber, that logs and their products have found continually extending and increasing markets. The citrus and other fruits and canned goods of California find, through continually lowering rates, a widening sale. The sugar beet and

the sugar industry of Colorado and California could never have been placed upon a paying basis had not the railways made sacrificial rates in the interest of these industries. . . . Where there has been overproduction of potatoes and other vegetables that must be marketed at once or perish, the railroads from the growing regions have made rates that saved the producers from loss. There is not a coal-field in the United States whose operations have not time and again called upon the railroads serving their mines to grant concessions in rates because of changing market conditions. The asphalt industry of Texas and California was built up by the railroads, which successively lowered their rates as prices had to be reduced to meet competition in distant markets. . . . The trade of the United States with the Orient is being built up by the making of rates to the Pacific coast that allow manufacturers to ship their merchandise to trans-Pacific markets.

The above illustrations refer chiefly to domestic trade, but others even more striking are furnished by the foreign trade of the United States. Every one knows that it was a combination of low railroad rates to the coast, and of low freights across the Atlantic, that enabled the American farmer to capture the grain markets of Europe. But few realise even yet the full extent of the economic revolution which this sudden invasion of cheap transportation produced. Fully twenty years ago the 'Nineteenth Century' published a notable article by an American writer, Mr F. B. Thurber, in which he said—

On the 15th December the steamer *Servia* left New York for Liverpool with four thousand tons of food, a

portion of which had left Chicago only a week previously. On the 24th December it was in Liverpool, four thousand miles distant, at a cost—and here is perhaps its most marvellous feature—of five dollars, or one pound sterling per ton: equal to 25 cents or one shilling per 100 lb. —a sum that a drayman would charge for carrying a parcel of similar weight from one side of London to the other.

If Mr Thurber were rewriting that passage to-day he might treble the shipment and halve the rate per ton, thereby increasing proportionately the advantage which the American farmer derives from abnormally cheap transportation. But the capture of the British market was an easy triumph compared with others that followed in its wake. Even Prince Bismarck had to capitulate to American railroad rates after making a strong fight against them. When the industrial development of Prussia began, the food consumption soon exceeded the domestic supply. Prices rose, in consequence, and food became so dear as to hamper industrial operations. Exactly the same situation arose in Prussia that compelled England to abolish her corn laws in 1846. Cheap food was indispensable to cheap manufactures, and consequently to success in foreign markets.

At that time not only were there high duties on foreign grain, but the Government railways charged high rates on domestic grain. Bismarck's dilemma was that one or other or both must be sufficiently reduced to satisfy the demand for cheap food. The railways as then operated could not

materially lower their rates, and the only alternative was to lower the customs tariff. Thus American grain found its way into Prussia, then the most protective state in Europe. But that was not all. In the end the American railroads benefited by their self-denial even more than the farmers did, for whom it was specially intended. When the special rates to Europe were first put in they barely paid working expenses. As often as not there may have been an actual loss, but in those days that did not matter much, as it would usually fall on the British bondholder. By degrees, however,

> tonnage upon the railroads increased so rapidly that the rates, which were at first put in to meet the emergency of a panic, became profitable rates. These low rates—lower than had anywhere before that time existed—have since then, with the steady development of the country, been still further reduced.

These interesting facts are derived from a paper read a few months ago (1906) before the Wheat Convention at Pullman (Washington), by Mr B. J. Grosscup of the Northern Pacific Railway. The paper, as a whole, is a very lucid and reasonable statement of the railroad case against Government intervention. At the same time it presents a broad practical view of the transportation problem in its American aspects. Thoroughly American in sentiment, in standpoint, and in its method of handling the facts,

it clearly illuminates its own side of the question. "To stimulate tonnage," said Mr Grosscup, "is the first consideration of the railroad traffic manager." In Washington states 20 per cent of railroad tonnage came from the farms, consequently,

> the prosperity of the farmer and that of the railroad are dependent one upon the other, and dependent practically in the same proportion. Any influence which will raise or lower the tonnage produced and marketed, adds to or cuts down the revenues of the carrier. Any influence which will raise or lower the price of transportation will add to or cut down the profits of the farmer.

The moral drawn by Mr Grosscup is obvious. The railroad and the farmer should "help each other along." The railroad, he said,

> must fix a rate which will allow the producer to lay by money in years of good yield and in years of high prices, so that he may continue his industry in less encouraging circumstances. On the other hand, you producers will find it an advantage to allow the railroads in years of abundant tonnage to lay aside a surplus to revise their grades, to straighten their curves, and to buy improved machinery, so that in years of poor crops and low tonnage the railroad may be able to carry you over without raising your rates when you cannot afford to pay.

Since the Railroad Rates Bill became a business proposition, farmers, traders, and shippers, generally, have been freely treated by railroad men to such talk as Mr Grosscup's. Doubtless it has been all honestly meant, and might be

lived up to if there were no external interference. If the farmers and the traffic managers were left to themselves they might realise to a moderate extent Mr Grosscup's idyllic picture of what their relations ought to be. Unfortunately every Garden of Eden is liable to the intrusion of beguiling serpents. The railroad Garden of Eden has its financiers, its speculators, and Wall Street parasites of all kinds. It is peculiarly liable to their attacks. In fact, the highly speculative conditions under which it operates invites them. It is their largest and most active field of operation.

A grain crop, which may be anything from three thousand million bushels to over four thousand millions, and which may vary in value by a thousand million dollars, almost compels speculation. For the grower it is a speculation as well as for the carrier, the dealer, and the banker. Strange, indeed, but unquestionably and unavoidably true, that the first and most necessary of human industries—food-growing—gives rise to the most systematic gambling. The food-grower and the carrier become involved in it whether they will or not. The railroads have always to provide in advance for moving a heavy crop, whatever it may actually turn out to be. And what a gigantic operation this is the average American himself has but a dim conception.

It was estimated that the crops of 1905, if they had all come to market direct, would have required between four and five million cars to move

them. Fortunately for the railroads they have to provide for only about a third of the total. Even that comparatively small share calls, however, for a million and a half of cars and nearly forty thousand locomotives. The traffic managers have a double problem to solve in this annual crop movement. First, they have to get the empty cars sent west, and then they have to bring the full cars east. The first is perhaps the greater difficulty of the two. All sorts of shifts have to be resorted to for getting cars sent west. So hard pressed for them are some of the Granger roads, that they offer reduced rates for west bound freight, simply to have the use of the cars back.

Between weather, markets, politics, wheat-corners, and car famines, many things may happen to a railroad during the crop-moving season. To aggravate the trouble the crop-movement generally clashes with the tail of the passenger excursion traffic. From August to the end of November every Western road expects to be in a state of hopeless blockade. One huge train has to follow another as fast as they can be made up. The quantities of freight handled are away beyond European reckoning. Any comparison between them and average English train-loads would sound absurd. Nor is it the weight of the train only that differs. The rails, the equipment, the traffic arrangements, and the whole scheme of management has to be on a corresponding scale.

Where an English traffic manager might boggle over supplying a station with two or three extra waggons, a Western manager has to collect a thousand cars and distribute them over fifty or sixty different stations. As for sidings and yard-tracks he has to be extending them all the time. He has to keep them ahead of the traffic instead of dragging months or years behind it, as may happen in easier-going parts of the world. Even second- or third-rate stations on Western roads have far more shunting accommodation than an average suburban station in London. The latter appear to be designed for an irreducible minimum of local traffic, and when a building boom or any little extra comes along they are at once overwhelmed. It is a common occurrence near London for builders and contractors to suffer serious inconvenience and delay which could be remedied by a few hundred feet of new yard track.

There is no petty parsimony of that sort about American railroad management. Its tendency is in the other direction, as British holders of American railroad stocks know but too well. Herein we have one of the most radical differences between the English and American systems. In England the man who has to be first considered is the shareholder. He has to get his modest half-yearly dividend in any case—and very modest it has become of late years. There was not much difficulty about this so long as

capital accounts were open and directors had a free hand for fresh borrowing. But when shareholders discovered that the new capital which was being piled up yielded little or no additional revenue, they insisted on drawing in. Capital expenditure has consequently been much reduced of late years. But so also, I fear, have been the current improvements and extensions which used to be charged to it. No doubt the roads are being adequately maintained so far as current traffic is concerned. It may be questioned, however, if as liberal provision is being made as formerly for developing traffic and giving increased facilities wherever they may be needed.

It is quite otherwise in the United States on all these points. The stockholder is not the first person to be considered, but the last. Managers are not merely taking care of current traffic, they are preparing for new traffic wherever there is the least prospect of securing any. The almost unbroken prosperity of the past decade has enabled them to practise freely their traditional policy of looking well ahead. "Betterments"—that special bugbear of the English stockholder—were never so lavishly indulged in as now. They not only divert many millions a-year of dividend money into unknown channels, but they necessitate large and frequent issues of new securities.

This "betterment" question is very complex, and has many pros and cons to it. When its demands were considered temporary, and could

be attributed to the half-made character of the roads, they were borne with scant patience. Now that they are becoming chronic they excite a fear that we may be permanently committed to them. They may imply that American railroads, and Western roads especially, are being so severely strained by the heavy traffic accumulating on them as to require practical rebuilding every ten or fifteen years. Should this be the case, "betterments" will in future have to be recognised as a second category of working expenditure. There will be, first, the ordinary revenue and expenditure as given in the monthly statements; and next, the extraordinary expenses. The latter are once more in a state of abnormal activity, if we may judge by the rapid flow of bond and stock issues now going on. A few years of such new issues, and the capital accounts of the railroads may lose all the benefit of the drastic reform they underwent in 1896.

Wall Street flatters itself nowadays that its railroad stocks have had the last drop of water squeezed out of them by the large payments made out of revenue for permanent improvements. But if watered capital has disappeared, there is still a large amount of dead capital—in other words, yielding no return to its owners. So recently as 1903, 272 million dollars out of 4906 millions of funded debt was paying no interest, and 2704 million dollars out of 4357

millions of stock was in a similar plight. The respective proportions were 4·33 per cent of funded debt, and nearly 44 per cent of stock.

In this respect the capital accounts of the English railways make a much better showing. In 1903 only 11·9 per cent of ordinary stock, 5·1 per cent of preference, and practically nothing of the debenture stock, were earning no interest. Preference and ordinary stock, taken together, are financially dead to the extent of only 8 per cent, as against 44 per cent of American stock. Before this flood of new issues set in, the non-interest-bearing securities of American roads was being reduced at a very satisfactory rate, but latterly it has shown some tendency to grow again.

There are now so many different railway systems in the world, and so many varieties of administration, that a bewildering diversity of results has become inevitable. The younger systems seldom follow in the track of the older ones, and the past is no reliable guide as to the future. American roads will never have much in common with English ones. Still less likely are they ever to approximate to the State railways of Germany, with their bureaucratic management and their semi-military discipline.

But there is one comprehensive question which affects the future of all railway systems, whatever their nationality or their local conditions. It is how their net earnings are to be affected by their future growth. No doubt or fear need be enter-

tained as to the expansion of their traffic; under any circumstances it is bound to be immense. But how is the new and ever-increasing traffic to pay? That is the kernel of railway finance. Unfortunately past experience, so far as it goes, is not encouraging on this particular point. The older railway systems show an almost unvarying increase in the ratio of working expenses and a decrease in the ratio of net receipts. English railways furnish a flagrant example of this apparent law of diminishing returns. It may not be so conspicuous in France or Germany, but there too it can be clearly traced.

The high-water mark of English railway dividends was reached in 1899. They had then the benefit of a conjunction of favourable conditions —heavy traffics, mild weather, and moderate expenses. In that year the railways of England and Wales reported gross earnings amounting in the aggregate to 86¾ millions sterling. In the five following years there was a further gain of fully six millions sterling gross, but hardly a penny of it reached the shareholders. What with an all-round rise in working expenses, charges on new capital, and other fresh burdens, dividends, far from keeping abreast of gross earnings, fell steadily behind them. Not since the early days of English railways have shareholders received so small a proportion of the gross receipts as they do just now.

This disappointing result is due to many causes,

some of them no doubt local, but others, it may be, inherent in the growth of railway traffic. The very prosperity of a railway may often penalise it in certain directions. And just where outsiders would naturally suppose that it was prospering most, it may be finding the greatest difficulty to maintain a fair margin of profit. If it be a trunk road linking together a number of large and growing cities, each of these cities may tax its strength severely. If it be a shipping port, it will require costly terminals, docks, and shipping facilities. If it be a mining or a manufacturing centre, it will be continually calling for new side-tracks, larger yards, and finer depots. At length it may become so expensive to supply these, that the densest traffic will not adequately repay the outlay. In London this extreme point has been reached on some of the urban lines. The cost of lengthening platforms, and otherwise providing for the growth of passenger traffic, more than swallows up the increase of revenue.

The larger the railway system and the greater the amount of capital invested in it, the more serious for it is this problem of the future. The American roads of to-day have more mileage than all the European systems combined. They have furnished a larger amount of securities, and these have wider markets than any European stocks of their class. If the law of diminishing return is going to hold true of them also, not only will their future be materially affected, but a new

element of uncertainty will be introduced into their present values.

American railroad managers would already seem to have a presentiment of the above danger. On all financial questions the best of them take a more conservative line than they did formerly. They no longer endorse the optimist anticipations of Wall Street, that net earnings will always be as progressive as the traffic itself. Still less do they countenance the idea that there is still room for indefinite cheapening of the cost of transportation. On this point they gave some very significant replies to leading questions put to them by the New York 'Evening Post.'[1] As regards net earnings, they were asked if they looked for further increase, for stationary conditions, or for a decrease. As to the unit of cost of operation, they were invited to say if they thought it could be still further reduced, or if the minimum had been already reached.

Involved in the latter issue are some most important financial questions. It symbolises the American railroad policy of the past decade. The "unit of cost of operation" has during that period been a magical spell to the whole railroad world. It has served as an excuse for enormous expenditures on so-called improvements, which have sometimes amounted almost to a complete rebuilding of the road. The perfect "unit of cost of operation" was only to be achieved by

[1] 'Evening Post,' December 31, 1904.

trebling or quadrupling the capacity of cars, and increasing proportionately the weight of the train. In order to carry trains three or four times heavier than they used to be, bridges had to be strengthened, rails to be made heavier, and locomotives more powerful. Up to a certain point the economy effected by the new method was obvious and indisputable. The cost of mere haulage was greatly reduced, but it now begins to appear that that reduction may be largely offset by increased cost of maintenance of way.

There are, in short, two sides to the "unit of cost of operation." In the first blush of its popularity we were allowed to see only its economical side. Now the reverse side is coming into view. Many railroad men in the United States are beginning not only to see it but to feel uneasy about it. President Truesdale of the Delaware, Lackawamra, and Western is of opinion that "the minimum cost of operation has been reached—for the present, at least." Further reduction, he adds, cannot be secured without a substantial reduction in wages and cost of steel, iron, and other articles used largely by the railways.

BOOK III.—ITS CREATIVE POWERS.

CHAPTER XIV.

CREDIT.

THE creative powers of American finance, as exhibited in the production and transportation of commodities, admit of little or no controversy. They are absolute matters of fact. All that is needed to demonstrate them is an array of figures which speak for themselves. With the other two creative powers—credit and capitalisation—it is different. They are not plain one-sided questions admitting of simple measurement or comparison. Neither are they purely economic questions. So far from being plain and simple, they are the most intricate and many-sided problems in the whole range of national economy. They involve ethical as well as economic issues. They cannot be judged solely by quantitative standards. Quality is often, and in fact generally, of greater importance in relation to them than quantity.

When we say of the United States that it is the largest producer of material wealth on record, that is an absolute unqualified distinction. There

can be no moral qualification to it—no detraction from the honour it reflects on American producers. So when we say that the United States leads the world in the science of transportation, that is also an absolute distinction without any moral drawback or reservation. There is no reverse side to the shield. Every mile of railway built and every additional ton of food or raw material raised are sheer boons to a country. They can be enjoyed without any fear of excess or misuse. On the other hand, credit and capitalisation are sinister as well as beneficent powers. They are good only up to a certain point, and after that they change their characters completely. When carried beyond the safety line they become perilous. When pushed to wild extremes, as they sometimes are in times of exuberant prosperity, they may wreck themselves and all the castles in the air that have been built up on them.

The development of national credit is thus only one part of the task. Making it solid and stable is the second and far more important part. So in capitalisation, magnitude may count for a great deal, but safety should count for a great deal more. It is humanly impossible to have magnitude and safety combined, so a choice has to be made between the two. Some people—the British, for instance—think first of safety, while others, notably the Americans, prefer size. They will sooner "take their chances" on a big thing than on a little one. Hence the huge volume of

their commercial and financial operations, which exceeds that of other countries in a far greater degree than the material production of the United States exceeds their production. As producers the eighty millions of Americans are not so very far ahead of their Old World rivals, but as traders and financiers they are away out of sight.

Even American readers will be hardly prepared to hear that the banking operations of New York exceed in volume those of London, but they do. In 1905 the aggregate returns of the London Bankers' Clearing House were rather less than 12,288 millions sterling, or 61,440 million dollars. In the same year the New York clearings aggregated 93,822 million dollars, or fully half as much again. This predominance of New York over London is not, as might be supposed, a matter of recent date. It is almost a quarter of a century old, the New York clearings having passed those of London so long ago as 1882. In that year their respective totals were 37,434 million dollars and 29,647 million dollars (5929 millions sterling). This comparison is favourable to London in so far as all its important banks are "in the clearing," whereas in New York a large number are "non-clearing."

A general comparison of the two countries in respect of bank clearings will magnify the American predominance greatly. It must, however, be limited on our side to England, there being no published returns for Scotland or Ireland. Even

for England they are only partial, being limited to eight clearing centres—namely, Manchester, Liverpool, Newcastle, Birmingham, Bristol, Sheffield, Leeds, and Leicester. The aggregate of 1905 for these eight centres was only 664 millions sterling (£664,443,800) or 3320 million dollars. In the same year the American bank clearings outside of New York amounted to 50,050 million dollars, or fully seventeen times the total of the eight chief provincial cities in England! So much greater is the volume of credit operations in the younger country than in the older one, that it implies wholly different methods of trade and finance as well as of banking. It may be interesting to contrast our eight chief provincial cities with the eight American ones that come nearest them in size. They appear below in parallel lists:—

BANK CLEARINGS OF 1905 IN EIGHT ENGLISH AND EIGHT AMERICAN CITIES.

	In millions of dollars.		In millions of dollars.
Manchester	1317·9	Chicago	10,142·0
Liverpool	1015·9	Boston	7,655·0
Newcastle	317·4	Philadelphia	6,929·0
Birmingham	277·8	St Louis	2,890·0
Bristol	155·8	Pittsburg	2,506·0
Sheffield	91·8	San Francisco	1,835·0
Leeds	87·8	Baltimore	1,290·0
Leicester	55·6	Cincinnati	1,205·0
	$3320·0		$34,452·0

Thus the bank clearings in 1905 of the eight chief interior cities of the United States were fully tenfold greater than those of the eight chief provincial cities of England. The volume of business represented by aggregate clearings of 34,452 million dollars a-year is away out of sight of one that clears only 3320 million dollars a-year. Of course, the excess can be partially explained away by differences in business habits and methods. In all classes of American business more frequent settlements are the rule than with us. There is nothing in Wall Street or in any American Stock Exchange corresponding with our fortnightly settlements. A fortnight's accumulation of Wall Street sales might run up to ten million shares, to say nothing of a few hundred million dollars of investment bonds. It would be almost an impossibility to get through the mechanical work of such an account. Wall Street brokers have all they can do to keep abreast of their daily settlements. Each day's sales have to be completed and paid for the following day. Loans have also to be renewed or paid off daily.

Seeing that Wall Street turns over at least a hundred shares for every one bought or sold in Capel Court, its daily settlement may easily be quite as large as our fortnightly one. In commercial payments there may not be so much difference between the two countries as in Stock Exchange operations, but they evidently call for

a much larger number of cheques in the States than they do in England. This may be partly due to shorter credits, partly to a less general use of bills and promissory notes, and partly to a more extensive use of small cheques. At large American works the practice is being introduced of paying workmen by cheque. In mining camps it is becoming popular both with masters and men, because of the trouble and risk avoided of holding big cash reserves.

But these are mere details compared with the true explanation of the enormous volume of American clearings — namely, the vast number of business transactions of all kinds that pass through the American banks. When all known diversities of American banking have been allowed for, the superstructure of American credit is still large enough to completely overshadow every other. It dwarfs anything that Europe can put in competition with it, and is, in fact, one of the most remarkable developments of American finance. Next to the physical resources of the country, the energy of the people, and their magnificent system of transportation, credit has been the strongest factor in making the United States what it is to-day.

Though the magnitude of American credit is its most striking and distinctive feature, it is not the most interesting or important. The first impression it makes on a foreign observer is greatly enhanced by closer examination. As step by

step we investigate its huge mechanism, our wonder grows and intensifies. Along with that there may arise in conservative minds feelings of suspicion and misgiving as to the possibility of so immense a fabric bearing the strain which adverse times must throw upon it sooner or later. It has long passed what Europe would consider prudent limits. But that alone is not enough to condemn it offhand, seeing that the material wealth and the brain power behind it are equally beyond European conceptions.

At the census of 1900 the total wealth of the United States was estimated at 94,300 million dollars—almost identical with the aggregate of the bank clearings in New York last year (93,822 million dollars). It was less, however, than two-thirds of the total bank clearings in the United States in the same year—namely, 143,872 million dollars. But in order to do justice to the banks, a considerable percentage should be added for cheques not cleared. If this be put as low as 15 per cent it will increase the 143,872 millions by 21,580 millions, making a grand total of 165,352 million dollars, or 33,070 millions sterling! It requires some thinking to realise such a tremendous fact as this, that the payments made through the banks in a single year are nearly double the amount of the estimated wealth of the country! It is much more difficult to conceive what an enormous addition

to the economic power and activity of the country must have hence resulted.

First of all, let it be noted that nearly the whole of these bank payments are founded on credit pure and simple. There may have been a few customers of the banks who traded exclusively on their own money, but at least 90 per cent of them traded on their credit. They were borrowers as well as depositors. The deposits and the loans were to a large extent the same money on different sides of the account. The banks, the depositors, and the borrowers entered, as it were, into a convention to trust each other under stated rules and conditions. A certain amount of legal money had to be put up as a guarantee fund, but the basis of the structure was credit alone. Every cheque was an instrument of credit, the real security for which was the character and good faith of the drawer.

In this vast network of credit operations, there were nearly twenty thousand different banks engaged. Their nominal resources, as reported to the Comptroller of the Currency in August 1905, were 16,918 million dollars, but that amount is subject to large deductions for cross entries. The working funds of the banks are their individual deposits, which in August 1905 aggregated 11,350 million dollars. We may assume, for the sake of simplicity, that these were all drawing accounts, though a good many of them may have been

special deposits. In 1905 they were actually drawn upon to the amount of 143,872 million dollars by means of cleared cheques, and probably to a further amount of 21,580 million dollars by cheques not cleared. Every dollar in deposit was thus chequed out thirteen or fourteen times in course of the year, and the trading capital of the country was augmented to that extent.

Of all the millions of traders with bank accounts, perhaps not one in fifty could have even begun business without the credit facilities thus furnished to him. Every enterprise, from the smallest to the largest, has been enabled through these facilities to multiply its operations five or tenfold—many of them much more. All the legal money in the country, greenbacks and silver certificates included, is a mere drop in the bucket compared with the payments by cheque. On January 1, 1906, the amount of money in circulation was 2671 million dollars, namely—

Gold coin and bullion . . .	$654,168,000
Gold certificates	480,939,000
Silver dollars	83,736,000
Silver certificates	463,960,000
Subsidiary silver	110,029,000
Treasury notes, 1890 . . .	8,275,000
United States notes . . .	343,262,000
National bank-notes . . .	527,173,000
	$2671,542,000

There was thus only one dollar of legal money in circulation for every 62 dollars paid by cheque

in course of a year: only one dollar of metallic money for every 92 dollars paid by cheque; and only one dollar of gold coin for every 146 dollars paid by cheque. Excessive as we are accustomed to consider the supply of money in the United States, banking credit is beyond all comparison a larger factor in the commercial and financial operations of the country. It is so immensely preponderant, that the metallic reserves, huge as they look, are a merely nominal safeguard for it. One year, or even half a-year, of bad banking might easily drain away most of the gold in New York. If such a calamity were to happen,—and it is not, to say the least, beyond the range of possibility,—the clearing banks might be thankful to have an independent Treasury with gold reserves of its own to fall back on.

Speaking with due respect for the banking profession as a whole, I doubt if in any part of the world it adequately realises the vast possibilities and the corresponding dangers of the credit system it has built up during the past half century. Least of all in England, where it originated, and has been most cautiously developed, does it appear to be clearly understood. The fundamental truth that credit is a thing by itself, apart from all the currency and banking problems of an older day, is as yet very dimly realised. The heads of the banking world in London indulge now and then in academic discussions on the nature of credit which betray

very slight familiarity with its first principles. On one occasion the question was gravely raised whether or not bankers could "create credit," and the conclusion arrived at was that the Bank of England could, but that the power of the outside banks to do it was doubtful!

These gentlemen were "creating credit" every day without suspecting it. They were like M. Jourdain, who had talked prose all his life without knowing it. The text-books they provide for the education of their clerks would have cleared up the point for them in a few minutes. But the British banker of the present day shares the distinction bestowed by Lord Beaconsfield on the British aristocracy—he never reads. The City nowadays considers it bad form, either to read or to "talk shop." Its ideas of banking credit are therefore to be excused if they seem hazy and uncertain. Half a century ago they were much more definite, as may be gathered from the banking text-books of that period.

Few of the functions of modern banking have been less thoroughly elucidated than the creation of credit, though it is the crux of the whole science. This oversight is not so much to be wondered at in English authorities, whose ideas come to them chiefly by inheritance, and to whom new facts are a nuisance rather than an edification. But it is a little surprising to find American authorities so wide-awake and well-informed as Mr Charles Conant, adopting the narrow

English point of view. His American experience should, I think, have shown him that whether or not that view be large enough to cover the credit operations of European countries, it is much too small for those of his own country.

Mr Conant opens the fourth book of his 'Principles of Money and Banking' with the following definition of credit:—

> One of the most important factors in the mechanism of modern finance is the use of credit. Credit has so greatly economised the use of money, that it has led in some quarters to the belief that it was capable of superseding money entirely. The use of credit in one form or another has become so nearly universal that money, if it did not retain the important function of the standard of value, would be to a great extent reduced to the subordinate *rôle* of settling retailed transactions. The greater part of the commerce of the world is carried on by a refined system of barter, in which banking credits in one form or another are the chief factors: *but sound banking involves the promise to pay metallic money, and therefore is based upon such money.*

This is the Lombard Street view to a hair-stroke, stated with a clearness and precision of which Lombard Street is itself incapable. It is also the academic view which has been expounded for years from all the chairs of political economy in Germany. Mr Conant has no difficulty in arraying a score or more of eminent professors in its support. But it is significant that the one English authority of any weight on the point—

namely, Henry Dunning Macleod—should be against him. Mr Macleod's name is identified with what may be called the large American view, as distinguished from the narrow English one. It was he, in fact, who first advanced the apparently paradoxical but practically true doctrine, that credit is a form of capital distinct from money. In his 'Elements of Banking,' he propounds a theory of credit exactly the reverse of Mr Conant's, and without endorsing it altogether, I reproduce it here that the two may be carefully compared.

Mr Macleod, having distinguished banking documents, like bills of lading and dock warrants, which are mere collateral securities, from bank-notes, bills of exchange, &c., which are pure forms of credit, proceeds thus:—

The merchant or trader who buys goods on credit is not the *trustee* or *bailee* of the goods, but their *proprietor*. The seller of the goods cedes the property in them absolutely, and receives in exchange only the abstract right to demand payment at a future date. Like the banker, the buyer is simply debtor to the seller. In both cases there is a new property created which may be recorded on paper, either in the form of a bank-note or a bill of exchange, which may be bought and sold quite independently of any specific money. Hence all forms of paper credit are absolutely separated from any form of specific money, and that is the very reason why they are called credit, because the holder of them has nothing but the right to demand money from some person.

To the ordinary mind it may not seem that much is gained by "separating credit absolutely from any specific money," but if Mr Macleod's rather wire-drawn reasoning be closely followed it will lead to conclusions of some practical value. He is on firm enough ground in pointing out that a debt, contracted in the ordinary course of business for value received, is actually represented by two distinct things, both negotiable. One is the commodity sold, which has passed into the hands of the buyer; and the other is the promise to pay at a future date, which has been given to the seller in exchange for the commodity. As soon as the bargain is completed the two things part company, and each goes its own way. The commodity may circulate in one direction, and the promise to pay in another. The first is in due course consumed, and the second has to be paid at maturity. But while they exist each is a commercial asset, or, as Macleod has it, an "economic quantity." The bill may be as capable of commercial service as the goods for which it was given.

This subtle doctrine is stated over and over again in a variety of ways by its ingenious author. He illustrates it by analogies drawn from Roman law, and by algebraic formulas too abstruse for these pages. But however far-fetched the argument may seem, there are the two results not to be got away from—the commodity and the instrument of credit existing side by side. They

are the twin bases of all credit and banking systems. The root of the difference between Macleod and other writers on debt is that they treat it as a negative quantity, while he treats it—when represented by a negotiable document—as a positive quantity. He dissents strongly from the teaching of Henry Thornton, one of the authors of the Bullion Report of 1810, that debts are mere cross entries,—credits in the creditor's books and debts in the debtor's. M. Cernuschi expressed the same fallacy in still more sweeping terms when he wrote, "that if we collected the balance-sheets of all nations into one, the debts and the credits would mutually neutralise each other, and there would remain only one account—existing goods."

Hard-shell bankers of the present day go even farther than M. Cernuschi did, and affirm that nothing would remain but metallic money. In opposition to these ultra-metallic views, Macleod maintained that debts, so far from being mere minus quantities, are active factors in all credit operations.

> We will give [he said] a very simple example to show how very erroneous the method of stating the question by Thornton and Cernuschi is: Suppose a banker holds a merchant's acceptance not yet due; suppose, at the same time, that the merchant holds an equal amount of the banker's notes. According to the method of statement of these writers the mutual debts cancel each other, and the result is nothing. But this is manifestly

erroneous, because the banker may, if he pleases, put the merchant's acceptance into circulation, and the merchant may put the banker's notes into circulation. Hence there would be two "economic quantities" in circulation, each producing the same effect as so much money.

The error of the hard-shell, or, as they are called in America, "gold-bug" bankers, lies in fixing their attention on the wrong end of the credit system. They concern themselves chiefly about ultimate liquidation, which is entirely beyond the range of practical banking. The essential question as to the credit operations of a country is not how to wind them up, but how to keep them going. If it had to come to a final wind up, all the gold and silver in existence would go a very short way toward liquidating the millions of debts and credits, which are every day offsetting each other in the trade of the world. Moreover, the ultimate liquidation of a credit system, whether forced or voluntary, is a contradiction in terms. It may overshoot itself and break down for a time, but the business remedy for that is not liquidation—it is a speedy restoration of credit. There is, however, no case recorded in the long catalogue of financial and commercial panics of money alone having restored credit. The disease has always had to be treated homœopathically. In a case of collapse the patient has to be revived with "a hair of the dog that bit him."

The financial history of the nineteenth century

would appear in a new light if Macleod's doctrine were consistently applied to it—that credit is not a mere supplement to money, but a distinct branch of finance. No amount of metallic reserve will prevent unsound credit coming to grief. Conversely, a very large volume of credit operations, if sound in themselves, may be safely carried on with small metallic reserves. It is not money alone that is behind them, but the whole substantial wealth of mankind. On this vital point Mr Conant is at issue with other American writers who adopt the broader view to be naturally expected in the vicinity of Wall Street. Mr Cowperthwait, for example, says in his 'Money, Silver, and Finance' (p. 195)—

> It is argued that money is the basis of credit, and therefore the more money we have in circulation the greater can be the expansion of credit. On the contrary, however, wealth, in general, is the actual base of credit, and money is only a small portion of the actual sum of wealth. Excepting in time of panic, no one thinks of handling money in a large way. No prices are higher for cash than for cheque. Nobody refuses credit to a customer because that customer has stocks, bonds, merchandise, or real estate instead of money in his pockets. Nearly all the time prices move up and down from causes which directly affect commodities individually or in groups.

There is no more crucial question in American finance at the present day than which of these contradictory views of the essence of credit is correct. On the answer depends a towering fabric

of credit operations, involving not only billions of dollars of capital, but the very existence of millions of people—farmers, manufacturers, merchants, and workmen. If Macleod's theory be right,—and it certainly seems to me to fit better than any other into the historical facts, English or American,—the bankers of the day are cherishing some dangerous illusions. To mention only one or two of the most obvious of these: what can be more risky than to assume that a collapse of credit can always be patched up with a few million dollars of imported gold? or that credit operations may be indefinitely extended as the stock of gold at the command of the banks increases? or that prices may be artificially forced up all round by banking combinations able to manipulate the money market at their pleasure?

A century ago prices were to a large extent regulated by the money market, but now it is a minor factor in the case. To-day the real regulator is credit, and this cardinal truth in the national economics of our time should be more obvious to the Americans than to any other people. It stares them in the face every day and all day. There is not a commodity they produce which is not more or less continuously under the influence of speculative credit: not a market they have but is upset every now and then by alternate inflations and contractions of credit paper. Such operations are hazardous in their mildest and most limited form, but in

the United States their reckless magnitude is becoming a menace to the financial peace and safety of the world. They create paper wealth with such fabulous rapidity as to dazzle and intoxicate, not merely the creators themselves, but whole nations.

Prices rise by leaps and bounds; values double and treble themselves with a single turn of the wheel of fortune. All these paper profits flow day by day into the banks, augmenting their deposits and furnishing material for fresh loans. The new loans produce fresh profits and further additions to the bank deposits. New banks are organised daily in order to get a share of the Pactolean stream that overflows their neighbourhood. And every new bank means not only more loans and deposits, but more note issues. The latest report of the Comptroller of the Currency records that between November 1904 and August 1905, a period of little more than nine months, the number of national banks increased by 280—namely, from 5477 to 5757. During the same short period the national bank-notes outstanding rose from 419 million dollars to 469 millions,—in round numbers, 50 million dollars. The individual deposits increased from 3707 million dollars to 3820 millions,—say, 113 million dollars.

Where such an expansion could take place in a few months, how much more was possible over a term of years? The United States banks,

since their last severe panic in 1893, have considerably more than doubled their total resources. But it must be remembered that a large portion of the increase, if not the bulk of it, has been simply a writing up of market values. The multiplication of credit is a snowball process, which, when skilfully conducted,—and its conductors grow more skilful every year,—may be carried on almost indefinitely. Temporary checks and reactions may delay it, but only a violent breakdown can stop it. Even from that, however, its recoveries are amazingly rapid — so rapid, indeed, as to puzzle alike the theorist and the practical financier.

The true explanation may, however, be very simple. The multiplication of credit is a snowball process which creates debits and credits simultaneously. For every borrower there must be a lender, and for every debtor a creditor. Bank ledgers are double columns in which credits and debits are set off against each other. The first figure as deposits, and the second as loans. In all well-conducted banking systems a steady equilibrium may be observed between loans and deposits. In other words, they have a marked tendency to rise and fall together. This phenomenon is well known in Lombard Street in connection with the private deposits and securities of the Bank of England. The greater part of these belong to Lombard Street and form its operating accounts. Its receipts

and payments are, as a rule, mere transfers from one account to another. However great the individual changes may be in Lombard Street balances at the Bank, their aggregates do not appear to vary widely.

Their equilibrium is liable to be upset by outside interference in the shape of a foreign demand for gold, but that having been satisfied it rights itself again. When there is no external disturbance, loans and deposits may go on growing *pari passu* until they break down under their own weight. While they can earn or otherwise provide income enough to live on, there is nothing to stop their growth. This unlimited multiplication of credit has hitherto been considered peculiar to the Bank of England. That, however, is merely because the process can be seen there in small compass. It is equally operative on a larger scale in other banking systems, and the banks of the United States offer the most striking example of it to be seen anywhere.

It is in the Bank of England, however, that the process may be best studied. There we find the inner circle of the money-market to which all the floating capital in London gravitates. Lombard Street, meaning thereby the clearing banks of London, the discount houses, the bill brokers, and all the moneyed interest, keeps its balances at Threadneedle Street. Most of the lending and borrowing operations of the Bank of England take effect through these balances. They have,

in fact, a double effect on them—what mechanical engineers would call a reciprocating action. The great majority of deposits are paid into the Bank of England by cheques on other accounts either in the Bank itself or outside of it. Thus a debit is created simultaneously with the credit. Conversely, when the Bank of England makes a loan or discounts a bill, the proceeds, if not taken in gold for export, must be paid into another account either in the Bank itself or outside of it. In this case a credit is created simultaneously with the debit.

There are only two obstacles to credits and debits being thus heaped up indefinitely. One is the necessity, legal or otherwise, of maintaining an adequate gold reserve. The other is the cost of carrying the credits, which grows heavier and heavier as the inflation proceeds. This is nature's check on booms and all other excessive creations of credit. It is sure, certain, and inevitable. But, on the other hand, an untold amount of substantial good may have been done before the collapse arrives. The worst crisis that the United States ever suffered did not destroy more than a fraction of the progress made in the preceding boom.

Nowhere has the creation of credit been so vigorously carried on as in the United States. Naturally its best and its worst features are to be seen there in greatest exuberance. The Americans have pushed the art of speculative inflation so far, and have worked so many ap-

parent miracles with it, that they may well begin to think its power unlimited. I have endeavoured to show how easily such a delusion may be fostered by the peculiar nature of credit operations. Credit may be created to any extent when the requisite brains and courage are forthcoming. The difficulty is not to create it but to keep it alive afterwards. In order to exist, it must be continually multiplying and expanding.

Vast piles of debits and credits may easily be balanced against each other so long as they earn their keep. The evil day comes when income falls short of interest charges. Bank credit is a splendid servant but a bad master, and when rashly used it must get the upper hand in the end. It is something for the Americans to be proud of, that in the dozen years between 1893 and 1905 their banking resources should have more than doubled, but the burden on their earning power has proportionately increased. On every addition made to the deposits interest has to be paid in some shape, and on every addition made to the loans interest has to be earned. In 1893 the whole 9492 banks in the United States—national, state, and private—had only 7088 million dollars of resources to take care of. In August 1905 there were 16,410 reporting banks with 16,918 million dollars of resources to handle—a considerably heavier job than that of 1893. A comparison of the chief items in the two years discloses a huge preponderence of credit over hard cash.

UNITED STATES BANK RESOURCES AND LIABILITIES, 1893-1905.

	1893.	Percentage of total.	1905.	Percentage of total.
Number of reporting banks	9492		16,410	
Capital stock	$1084,500,000	13·7	$1,463,200,000	8·6
Surplus	696,400,000	9·0	1,439,500,000	8·4
U.S. bonds	373,900,000	4·7	588,600,000	3·5
All other bonds	1008,100,000	12·8	3,399,200,000	21·0
Cash	515,900,000	6·5	994,100,000	5·2
Loans	4191,700,000	53·3	9,027,200,000	53·3
Total resources	$7870,500,000	100·0	$16,911,800,000	100·0
		Percentage of resources.		Percentage of resources.
Deposits	4535,800,000	57·6	11,350,900,000	67·0
Notes in circulation	672,500,000	8·4	851,800,000	5·1
	$5208,300,000	66·0	$12,202,700,000	72·1

BOOK III.—ITS CREATIVE POWERS.

CHAPTER XV.

CAPITALISATION.

THE most exuberant element in modern finance happens also to be the youngest. The art of capitalisation has not been seriously practised, even in its native country, for more than seventy or eighty years. Few of our grandfathers ever heard the word "capitalisation," and they would not have understood it if they had. It belongs to a kind of business which did not come into vogue until the first quarter of the nineteenth century had nearly run out. In 1821 the Bank of England resumed specie payments, and a financial boom was the sequel. A few years later the era of joint stock finance began.

A free hand was given to joint stock companies to "capitalise" themselves, as it was called. In other words, their promoters could make the capital what they pleased, and subdivide it as they pleased into large or small amounts. This freedom has been liberally exercised throughout the history of joint stock finance. It was found

that a large capital was almost as easy to raise as a small one—often easier, in fact. The larger the bait the better it would go down with the average gudgeon. A premium was thus put on over-capitalisation as well as on other forms of dishonest company promoting.

Over-capitalisation has been an inherent vice of joint stock finance from its very birth. No law has as yet succeeded in checking it, or even in moderating its excesses. Public opinion is powerless against it, and will continue to be so long as a large and dominant section of the public are in sympathy, if not in actual league, with the over-capitalisers. But the greatest difficulty of all in regulating capitalisation is the absence of definite intelligible standards. In another twenty years, perhaps, it will have developed into a recognised science, but as yet it is only a compound of juggling and guesswork. Scientific economists have to take it in hand and analyse the "original concept" of capitalisation. Before they can do that, they must clear up the mental confusion which still prevails as to the nature of the various interests capable of being capitalised. We know, of course, in a general way that the process can be applied to everything marketable, or, as the economists would say, to all "exchange values." But what are "exchange values," and what definition can be given of them which will at the same time cover tangible commodities, trading credits, and speculative counters?

Nowadays all these can be, and actually are, capitalised. Every imaginable interest, however dubious or ephemeral, can be converted into an "exchange value." The volume and variety of "exchange values" have become so great as to overshadow their original basis. The inverted pyramid of credit operations has spread out so far at the top that the small point it rests on is almost invisible. Before the age of high finance began, "exchange values" were based mainly on commodities, and to a comparatively small extent on credit operations. Now the tables have been turned, and credit is the chief element in them, while commodities are of secondary importance.

Commercial capitalisation is being superseded by speculative capitalisation, with a long train of evil results to follow. The most obvious of these is an artificial, lopsided, and precarious distribution of wealth. Less obvious, but even more pernicious, is the undue command which the speculative capitaliser obtains over the raw materials of the world's industry. The staple commodities on which human wellbeing, and even human life, depend are no longer under the control of the producers, but of an ever-changing crowd of speculators. Take steel, for example, and see what a wide gulf there is between its *bonâ fide* commodity value in original cost of production, and its "capitalised value" in the shape of United States Steel Corporation stock. The commodity value is a real thing—a solid "eco-

nomic quantity." The "capitalised value" has a mere kernel of reality enveloped in clouds of financial gas.

Unfortunately, the clouds of financial gas are, in speculative times, quite as saleable as the original commodity itself. The two get to look so much alike that all sense of the radical differences between them disappears. It is forgotten that while the commodity has physical limits, the airy structure of speculative values evolved from it may go on growing till it topples over. A still more vital difference which is being gradually lost sight of is that the commodity itself possesses utility as well as exchange value, while the superadded values may be purely artificial. Where spontaneous they may be mere algebraic signs, and where the results of manipulation they may be only gambling counters.

In either case the public are liable to be seriously misled. They may, and in fact do, mistake the algebraic signs for substantial wealth. Worse still, as regards the gambling counters, they may be tempted to trade in them as things of real value. The substance and the shadow become so blended together as to dazzle even experienced eyes. Then comes the worst result of all—the manufacturers of the shadows ultimately get control of the substance. It is a dismal but unavoidable fact that a million dollars made in Wall Street has as much purchasing power as a million dollars earned by raising wheat or cattle. The

successful speculator creates nothing; he adds nothing to the existing stock of commodities, whereas the wheat-grower does. But he has an equal right with the wheat-grower to draw on the existing stock of commodities to the extent of his one million dollars. Though his million dollars is an economic fiction—a cross entry in Wall Street—he has the right to convert it at will into the best and most durable forms of property.

Professional capitalisers are invariably speculators—it is a necessary incident of their calling, —but they are often something more than speculators. They can be producers as well. In this respect American capitalisations compare favourably with those of other countries. Wall Street with all its faults has produced few company promoters of the Hooley type—that is, the windbag sort, who buy up trading concerns for the purpose of inflating their capital and selling them again. American boomers seldom stoop to that sort of game. They are as a rule practical men, who take hold of a business in order to develop it. The over-capitalising is not primarily intended to fleece the public and then let go. It is rather regarded as a discounting of future growth, and the discount does not always prove excessive. On the contrary, there are many cases of industrial organisations which started with an apparent overload of capital, and in course of time managed to live up to it. Among railroad stocks this has been of late a very common experience.

"Capitalising ahead" may be regarded as a characteristic feature of American finance. It is an ingrained habit which even the official statisticians countenance. They are the champion capitalists, and it is hardly to be wondered at if their example has a considerable influence on financiers. When the Census Bureau sets the pace, why should not Wall Street follow at a respectful distance? At every succeeding census the Bureau patriotically adds billions to the national income and tens of billions to the national capital. It may be wise not to inquire too minutely how these billions are arrived at. They are worth accepting if only for the exhilarating moral effect they have on the country.

The mere idea that the American people as a whole are richer by 20,000 million dollars than they were ten years ago, is an encouragement in well-doing not to be captiously criticised. It is the same kind of stimulant to devout believers as the British income-tax returns. They are a recognised standard of national wealth, when in a majority of cases they are only standards of expenditure. In one respect the American wealth census has an advantage over the British income-tax assessments. If not scientific in itself, it may be turned to scientific uses. There are checks which may be applied to it, and by means of which some fairly reliable conclusions may be arrived at. It will be admitted, I hope, as an elementary principle that the growth of com-

modities in a country ought to bear some reasonable proportion to the growth of its census wealth. At all events the two kinds of progress, material and statistical, deserve to be compared.

According to the official census, the national wealth of the United States increases at the rate of about 3000 million dollars per annum. The totals at the close of each decade from 1860 to 1900 were as under:—

WEALTH CENSUS OF THE UNITED STATES, 1860-1900.

1860	$16,159,616,000
1870	30,068,518,000
1880	42,642,000,000
1890	65,037,091,000
1900	94,300,000,000
Increase, 1860-1900	$78,140,384,000

AVERAGE INCREASE PER ANNUM.

1860-1870 . . .	$1390,890,200
1870-1880 . . .	1257,348,200
1880-1890 . . .	2239,509,100
1890-1900 . . .	2926,290,900
1860-1900 . . .	1953,509,600

The Census Bureau is thus capitalising the wealth of the nation at the rate of nearly three thousand million dollars per annum. During the decade 1890-1900 the actual average was 2926 million dollars, and next census will no doubt show a considerable advance on that. Confirmation direct or indirect of this most comforting

doctrine is greatly to be desired. But how is it to be got? There are a few shreds of collateral evidence. The Agricultural Department furnishes one in its annual valuation of the farming products of the country. If we select these for the closing year of each of the above census periods they will show as under:—

UNITED STATES FARMING INCOME.

1870	$1,958,030,927
1880	2,212,540,927
1890	2,460,107,454
1900	3,764,177,706
	$10,394,857,014
Average, 1870-1900	$2598,714,253

The above farming income of $2460,000,000 in 1890, taken in conjunction with the $2926,000,000 of annual increase in the wealth census of the same period, suggests—though perhaps not intentionally—that the American people during that decade lived on their minerals, and saved up the whole of their agricultural income. We were wrestling with this paradox when the annual report of the Secretary of Agriculture for 1905 reached us. At first glance our eye fell on the startling statement that "wealth production on the farms of the United States in 1905 reached the highest amount ever attained in this or any other country—6415 million dollars."

A jump from 3764 million dollars to 6415 millions in the short period of five years would be indeed sensational, if correct. It implies either an immense increase in production or a great advance in prices, or both. But the crop returns of the Agricultural Department do not bear out such a suggestion. In order to make a decisive test we have reckoned up the aggregate yields of the principal cereals—wheat, corn, oats, and barley—for two periods of five years each—namely, 1895-99 and 1900-05. The results obtained are tabulated below.

UNITED STATES CEREAL CROPS, 1895-99 AND 1900-05.

	Aggregate, 1895-1899.	Aggregate, 1900-1905.	Increase.	Per cent.
Wheat (bushels)	2,647,389,012	3,130,974,083	483,585,071	18
Corn "	10,340,310,261	10,862,928,578	522,618,317	5
Oats "	3,757,610,513	4,212,467,176	454,856,663	12
Barley "	352,926,690	566,423,126	213,496,436	65
	17,098,236,476	18,772,792,963	1,674,556,487	9·8

It will be observed that the aggregate yields of these cereals were less than 10 per cent larger in the second five-year periods than in the first. The premier crop, corn, shows a gain of only 5 per cent; oats is next smallest, with 12 per cent; then wheat 18 per cent; and finally, barley, 65 per cent. But the last is a very insignificant crop compared with wheat or corn. Prices of

course were higher in the second period than in the first, though not materially. The wheat average in 1895-99 was 83 cents per bushel, and in 1900-05 it was 88 cents. The corn average in the two periods was 38 cents and 57 cents respectively. Whatever benefit accrued from these higher prices would be confined to the growers, so far as the proportion of the crop consumed at home was concerned, and that was the great bulk of it. The nation as a whole would benefit only from the higher prices obtained for the small proportion exported.

Price, in short, is a very minor item in the calculation. The substantial addition made to the cereal wealth of the United States in 1900-1905 as compared with 1894-99 was, as we have shown, an increased yield of barely 10 per cent. The crops of 1905 were no doubt rather better than the average of the preceding five years, but it is difficult to follow the Secretary of Agriculture when he pictures the "wealth-production on the farms of the United States" shooting up from a modest 3704 million dollars in 1900 to 6415 million dollars in 1905. He is still more difficult to follow when he proceeds to capitalise this farming wealth with poetic enthusiasm.

"Besides this enormous yield of wealth," he says, "the farms of the country have increased in value in the past five years to a present aggregate of 6133 million dollars. *Every sunset during the last five years has registered an increase of*

$3,400,000 *in the value of the farms of this country.* This increased value," adds the Secretary of Agriculture, "is invested better than in bank deposits, or even in the gilt-edged bonds of private corporations."

Always bearing in mind the cold fact that the four principal American crops aggregated only 9·8 per cent more in the five years, 1900-04, than they had done in the five years immediately preceding, let us see how generously farm wealth is capitalised by the Census Bureau at Washington. "The value of farms and farm property" has gone up by leaps and bounds since 1870, thus—

CENSUS VALUATION OF FARMS, 1890-1900.

1860 . . .	$7,980,493,000
1870 . . .	8,944,857,000
1880 . . .	12,180,501,000
1890 . . .	16,082,267,000
1900 . . .	20,514,000,000

In the last of these four decades the capital value of "farms and farm property" is raised by 4432 million dollars, or 886 millions sterling. This, added to the increase in the preceding decade — 3900 millions, — makes a phenomenal gain in twenty years of 8332 million dollars, or 1666 millions sterling. Does any one seriously believe that the earning power of these farms has increased to anything like that extent? On

the contrary, the value of the wheat crop of 1900 is said to have been $11,248,000 less than that of 1890; the corn crop, $3,215,000 less; and the oat crop, $13,379,000 less. "In comparison with 1890, the farmers in 1900 not only raised over a billion bushels of grain, for which they got nothing, but were out nearly 78 million dollars besides."

If it is not earning power that the Census Bureau capitalises, then it must be increased acreage, or higher values of land, or both. Between 1880 and 1900 there was certainly a considerable expansion of improved farm lands in the States. In 1880 the total area was 284,771,000 acres, and in 1900 it had increased to 414,498,000 acres — 129,727,000 acres more. This, at $10 per acre overhead, might account for, say, 1300 million dollars of the 8332 millions added by the Census Bureau to its capitalisation. The other 7000 million dollars can only be accounted for by a general advance in land values.

This is a special advantage the farmer enjoys in prosperous times. When crops and prices are both good, as they have been lately, he derives a double benefit—first, from the increased proceeds of his crops; and secondly, from the consequent rise in land values. The latter cut a large figure in the latest annual report of the Secretary of Agriculture. He enters freely into details of the increase in value of farm lands in various states during the year 1905.

Figured in dollars of gain per acre, the increase during the five years past of medium farms was, in the North Central division, $11·25; in the Western division, $5·36; in the North Atlantic, $5·26; in the South Atlantic division, $4·93; and in the South Central division, $4·66. The average increase for the United States was $27·31. Hay and grain farms show an increase of 2000 million dollars; live-stock farms a still larger gain; dairy farms, 369 million dollars; tobacco farms, 57 million dollars; rice farms, $3,300,000; fruit farms, 97 million dollars, and vegetable farms, 113 million dollars.

All these "gains per acre" are doubtless very acceptable to the owners of the land, but they will not do much for the nation, unless they are accompanied by a corresponding increase of agricultural products. It is abundance of commodities, rather than high prices or speculative values, that enriches a community. This is a hard fact for capitalisers to learn, and a still harder one to remember in practice. Even statistical capitalisers find it difficult to distinguish between the shadow and the substance.

If we extend our comparison of production and capitalisation to other staple crops, even greater discrepancies will be found than have been disclosed in the cereal crops. The following table exhibits the aggregate yields of cotton, wool, and sugar in the two quinquennial periods:—

[TABLE

UNITED STATES TEXTILE CROPS, 1895-1899 AND 1900-1904.

	Aggregate, 1895-1899.	Aggregate, 1900-1905.	Increase.	Per cent.
Cotton (bales) . .	48,291,395	51,239,451	2,948,056	6·0
Wool (lb.) . . .	1280,287,973	1486,713,013	206,425,040	16·0
Sugar (tons) . .	1,421,029	1,298,265	122,764*	8·6

* Decrease.

The five years' gain in cotton—the most important of the three crops—was only 5 per cent. In wool it was 16 per cent, but sugar showed a decrease of 8·6 per cent. Nevertheless all these industries will doubtless be generously dealt with in the next national capitalisation. The champion staples, however, will be neither cotton nor cereals, but minerals. They have indeed provided something substantial for the Census Bureau to capitalise. Their outputs in the two quinquennial periods, as given below, show a wide range of increases from 39 up to 75 per cent (see p. 328).

For exact information as to how these increased outputs are being officially capitalised we shall have to wait a year or two longer. Meanwhile two or three other tests equally interesting may be applied to them. The prolonged boom in cereals, cotton, and minerals has been accompanied by an unprecedented outburst of activity in banking and monetary business generally. In the ten years 1895-1904 bank deposits more than

UNITED STATES MINERAL OUTPUT, 1895-1899 AND 1900-1904.

	Aggregate, 1895-1899.	Aggregate, 1900-1904.	Increase.	Per cent.
Coal (tons) . . .	945,575,903	1,400,581,759	455,005,856	48·0
Pig-iron " . . .	53,116,752	81,995,183	28,878,436	54·0
Steel " . . .	38,126,194	66,890,203	28,764,009	75·0
Copper " . . .	1,084,792	1,508,420	423,628	39·0
Petroleum (galls.) . .	12,043,055,912	18,439,830,024	6396,774,142	53·0
Total value of minerals .	$3,546,082,682	$6,119,510,800	$2573,428,118	72·8

doubled, having risen from 4921 million dollars to over 10,000 millions—equal to 103 per cent. By a curious coincidence bank clearings increased almost exactly at the same rate. In 1895 they aggregated 50,975 million dollars, and in 1904 102,150 millions—a gain of 104 per cent. Even the "metallic" currency contrived to make a stretch of 57 per cent, which, in any other country than the United States, would be considered pretty fair growth for one decade. The money in circulation at the end of 1895 amounted to 1602 million dollars, and by the end of 1904 it had got up to 2519 millions. All over the country, and especially in Wall Street, the merry game of capitalisation was going ahead much more rapidly than the output of commodities.

Hitherto, capitalisation has been studied and criticised rather too much from the financial side. The dangers it threatens to sound finance have overshadowed all other considerations. But it involves very grave economic questions as well, which are as yet almost untouched. The huge combinations of capital formed in the United States during the past decade have produced such dramatic effects in Wall Street, that these monopolise public attention. But far more important effects are to be traced in the industrial and commercial spheres of national activity. Immense advances as they have caused in the stock markets, these are ephemeral incidents compared with the fabulous developments that have

taken place contemporaneously in the staple industries chiefly affected by them.

The time has passed for any one, however conservative, to regard the recent expansion of iron and steel production in the United States as a mere temporary inflation. It marks the opening of a new industrial era, with entirely different sentiments and principles to any hitherto experienced. The most distinctive idea that can be given of them is that they are the direct antipodes of Cobden sentiments and principles. The basis of the Cobden gospel is cheapness—cheap food, cheap labour, cheap government. So far the tendency of American capitalisation has been toward dearness—dear food, dear labour, dear government. For that very reason it is apt to be condemned offhand. But a full and fair comparison between the two gospels has yet to be made. The question is, Under which of them is a community likely to come out best in the end? Which will produce better workmen, better employers, and better citizens?

The Cobden gospel has the advantage of its American rival in so far as its virtues appear on the surface, while its defects can be discreetly kept out of sight. For the man with a safe substantial income it is pleasant to live in a country where every dollar he spends has the largest possible purchasing power. But the man with a narrow and precarious income would benefit much more by an addition of 10 per cent to his

earning power than by a reduction of 10 per cent in his cost of living. England's steadily increasing army of unemployed and unemployables is the hardest problem that Cobdenism has yet encountered. It indicates the point where the gospel of cheapness is to break down.

That is precisely where the American gospel has so far proved strongest. It has confessedly made everything dearer, labour as well as cost of living. But the labourer has gained more in wages than he has lost on food and lodging. All other classes are more or less in the same position. The net outcome of the universal rise in prices has been a certain amount of prosperity for everybody—huge fortunes for some, modest fortunes for others, and improved conditions all round. We express no opinion as to how long the improvement may continue, still less how much farther it may go. It concerns us only as an existing phenomenon, largely due to a new economic and financial force which has come into operation in the past few years.

This remarkable phenomenon calls for severe and systematic analysis, if for no other reason than because of its novelty and its variation from past economic experience. We must needs ask ourselves where the old methods of capitalisation end and the new methods begin. For the sake of distinction let us call the old methods commercial and the new ones speculative. Previous to the Morgan *régime* capitalisation had some

relation to tangible assets and earning power. Now these are quite negligible details. A manufacturing or a trading concern used to be valued according to the custom of the particular trade at so many years' purchase of the net profits, after ample allowance had been made for depreciation, bad debts, and other contingencies. That was commercial capitalisation — the mere rudiments of the art, as it were. The new method of speculative capitalisation surrounds the prosaic tangible assets with a halo of poetic prospects and possibilities.

Under the magic wand of the new capitaliser cents blossom into dollars and dollars into millions. In the balance-sheets of up-to-date trusts, goodwill is capitalised on as liberal a basis as buildings and freehold lands. Coal and iron in the bowels of the earth are valued as precisely as if they were at the pit-mouth or in railroad cars. When Mr Schwab was asked by a New Jersey court for details of the twelve hundred million dollar capital of the Steel Trust, he coolly started with an item of one hundred million dollars for its mineral lands! Seeing that it may take fifty years or more to bring all these minerals to the surface, Mr Schwab as a capitaliser stretches far into the future. Poor posterity has never been so heavily drawn upon before. It may happen that Mr Schwab and his associates, thanks to their far-reaching greed, will not be great favourites with posterity.

In some countries questions of public policy have been raised as to mineral monopolies like theirs. If there were good grounds for the old English law of *mortmain*, as applied to land, there must be much stronger grounds for applying a similar law to American minerals. The English "dead hand" might lock up a landed estate and prevent it being properly administered, but it could not make away with the land. When a "dead hand" gets hold of an iron or coal mine it clears out everything, and no capitalising miracle can replace it.

The nation is losing daily by the abstraction of its most valuable minerals, and it obtains no compensation from the capitalising schemes of Mr Schwab and his colleagues. It is rather more likely to lose than to gain through them. Speaking broadly, it is not prices, natural or artificial, that concern the public so much as abundance of commodities. Capitalising operations on a heroic scale may, as we have already noted, stimulate trade, raise wages, and produce a general sense of prosperity for the time being. But when the boom is over the public find themselves up again against the old old question, which is the true test of wellbeing—Are commodities scarce or plentiful?

A bushel of wheat is worth no more to the community when its market price is 5s. than when it is only 3s. 6d. The man who can sell it for 5s. is able, of course, to purchase more of

other commodities than the man who gets only 3s. 6d. for it. But, by way of compensation, he may get a better price than the other man for his hay or his oats. In the ebb and flow of market prices a general average is established which may do rough justice to all classes of buyers and sellers. Anyhow, if it does not, society cannot help it. There is no possible remedy, legislative or judicial.

Society is directly interested in the commodities themselves, but only indirectly in their market-prices. It benefits greatly from a good harvest, and suffers greatly from a bad one. From its point of view, wealth, or wellbeing, means a sufficiency of food, clothing, and housing to keep its members in physical health. A community which possesses all these necessaries, and has them universally distributed, may be prosperous though it has little else. Shops, markets, banks, and stock exchanges are secondary developments. Their operations may provide incomes for millions of people, but they cannot add an iota to the original supply of food, clothing, and housing. They may stimulate a demand for such things, and thereby increase their production, but that is quite a different matter from producing.

Exchange values are thus, to a large extent, mere counters. However much they may be shuffled and reshuffled, they neither add to nor take away from the stock of commodities existing

at a given time. They cannot make two blades of grass grow where only one grew before. A commodity may be more needed in one place than another, and transporting it to that other place may raise its exchange value. One man may be able to make better use of it than another, and transferring it to him will raise its exchange value. An increase in the supply of money or of bank credit will raise all exchange values more or less. A combination of speculators to boom certain commodities may double or treble their exchange values.

All these movements may take place without adding a single commodity to the existing stock, or changing the character of any one of them. The wealth represented by the commodity itself is always essentially different from the artificial values subsequently added through commercial or financial manipulation. It is the latter kind of wealth that millionaires are generally made of. Paper values as a rule figure much more in their balance-sheets than commodity values. They are seldom producers pure and simple, often not producers at all. Money, credit, labour, and all the materials of industry may be nothing more to them than pawns in their game.

BOOK IV.

ITS DESTRUCTIVE POWERS

BOOK IV.—ITS DESTRUCTIVE POWERS.

CHAPTER XVI.

ITS WASTE OF NATURAL RESOURCES.

THE Americans, like other strenuous people, have at times fits of self-depreciation, in which they criticise themselves more severely than any foreigner might venture to do. On these occasions they sometimes call themselves "a nation of prodigals." There may be more truth in the charge than they fully realise. They are prodigal not only in their personal and social expenditure, but in their whole economy. They are prodigal of human brain and muscle; prodigal of machinery; prodigal of raw materials; prodigal of currency; prodigal of banking facilities; prodigal of legislation.

They hold the record both as creators and destroyers. They have to destroy ruthlessly, in order to produce enormously. In their engineering works they scrap more machinery than would fit out an ordinary nation. In order to save a tenth

of a cent per ton mile, they pound a railroad to pieces with monster cars and locomotives, so that it has to be practically rebuilt every eight or ten years. For the sake of "licking creation" as iron and steel producers, they gut their iron mines with demoniacal energy. In their paroxysms of speculation and money-making they wear themselves out long before their time. Some distinguished Americans begin to feel anxious lest the race itself should be wearing out. They see that the strenuous life may be overdone as well as the luxurious life, and that the most wasteful of all lives is the one which combines luxury with strenuousness. Every year thousands of too eager Americans literally consign themselves to the scrap-heap.

Thoughtful men find an alloy of sadness in the joy of industrial prosperity when they remember how much waste of life and of natural resources is involved in it. The principal factors in a boom—coal, iron, and other minerals—are wealth that cannot be replaced. Once consumed, they are gone for ever. This should qualify the pride of industrial states in the growing output of their mines and iron works. They are, in fact, challenging each other to a headlong race for the exhaustion of minerals which ought rather to be husbanded. The old Mexican mine-owners were wiser in their generation than the go-ahead Americans who are pushing them aside. They fixed the amount that should be taken yearly out of each mine, and rarely, if ever, exceeded

it. It was enough to yield them an income equal to their modest wants, and in those days no one had any use for more. There was no Wall Street, no multi-millionaires, no beef or steel trusts.

The American idea of mining is the very antithesis of the Mexican. It aims at tearing out the contents of a mine in the shortest possible time, and getting the highest possible price for them. It does not waste a thought or a sentiment on posterity—not even on its grandchildren. In less than fifty, perhaps in less than twenty years, this question may appear to the Americans in a different light. What is now gloried in as phenomenal progress may be regarded as phenomenal prodigality. However immense the mineral deposits of the great Republic may be, the extraction of a million and a half tons daily must begin to tell by-and-by. Local exhaustion is already no unusual occurrence. It is only by continually opening up new sources of supply that the "phenomenal outputs" are maintained. Old mines are, as a rule, either stationary or retrogressive.

This is very marked as regards all the principal metals — iron, copper, gold, and silver. The annual production of iron ore, for instance, exhibits most imposing totals. In the decade 1893-1902 it practically trebled itself. In the half dozen years from 1893 to 1899 it more than doubled itself, and in the next four years it gained a further 50 per cent. The following figures form a historical record :—

UNITED STATES OUTPUT OF IRON ORE.

	Tons.
1893	11,587,629
1899	24,683,178
1902	35,554,135
Increase, 1893-1902	23,966,506

But when we trace this enormous production to its several sources, we find that its growth has not been at all uniform geographically. The chief producers of ten years ago are now far in the rear, and the chief producers of to-day were little known ten years ago. The Lake Superior group of mines, now by far the most important in the Union, illustrates this fact very strikingly. It is divided into five separate ranges—Marquette, Menominee, Gogebic, Vermilion, and Mesabi. They are here given in the order of their ages, and the youngest, it will be seen, is much the largest producer. It was only opened, however, in 1892.

OUTPUT OF LAKE SUPERIOR IRON ORES, 1893-1902.

	1893. tons.	1902. tons.
Marquette	2,064,827	3,734,712
Menominee	1,563,049	4,421,250
Gogebic	1,466,815	3,683,792
Vermilion	815,735	2,057,532
Mesabi	684,194	13,080,118
	6,594,620	26,977,404

Thus, out of fully twenty million tons increase, more than twelve millions were obtained from a single group of mines, and that the youngest. The three oldest ranges contributed less than a third of the total increase, less than seven million tons against thirteen and a half millions from the two youngest ranges. This is rendered all the more remarkable by the fact that the Lake Superior mineral field is the most progressive in the United States. If its old mines are increasing their output slowly, the still older mines in the East and South will probably be slower still. With the exceptions of Michigan and Alabama, all the other iron ore states are of small account indeed beside the Lake Superior district. The three states of Minnesota, Michigan, and Alabama produce 85 per cent of all the iron ore mined in the Union. Twenty-two other states and territories make up among them the remaining 15 per cent. In 1904 the relative totals were :—

UNITED STATES IRON ORE BY STATES, 1904.

	Tons.
Minnesota	12,728,835
Michigan	7,089,887
Alabama	3,699,881
	23,518,603
Twenty-two other states and territories	4,125,727
Grand total	27,644,330

Pennsylvania, New Jersey, and New York States, the original sources of iron ore, have now shrunk into insignificance as producers. But Pennsylvania has not yet been ousted from the head of the list of iron-smelters. Its own output of 397,000 tons in 1904 was a mere fraction —only 5 per cent—of the 7,644,000 tons that it smelted. As a producer Pennsylvania has even fallen behind New York, whose output of iron ore in 1904 was 842,000 tons. Virginia and West Virginia between them turn out only 550,000 tons per annum, notwithstanding all the strenuous development, financial and otherwise, which they have lately enjoyed.

It would be a very interesting speculation how the iron and steel industries of the United States might have stood to-day had the Lake Superior ores remained undiscovered. Unquestionably it was these ores that gave them their first important stimulus. Before the Marquette mines come into operation in 1854, the American output of pig-iron had only once or twice exceeded half a million tons a-year. It had increased to four million tons when the first of the Minnesota ranges was opened up in 1884. In the next seven years it doubled itself, thanks chiefly to Minnesota. But the iron boom did not get into full swing until 1892, when the Mesabi range, the youngest and richest of them all, started work. By 1903 the output of American pig-iron had again doubled itself, and, as has been

already shown, two-thirds of the raw material for that expansion came from one range—the Mesabi.

Without the Mesabi mines, there could have been no iron and steel boom in 1898. Mr Morgan might not have found it worth his while to form the Steel Trust. There would not have been steel enough in the country to build thousands of miles of new railroads, let alone tens of thousands of "skyscrapers" and hundreds of thousands of steel bridges. The Mesabi range has created more millionaires and multi-millionaires than anything that the Americans ever struck before. And if anything were to go wrong with the Mesabi range, there might be a bad recoil in the iron trade. The Americans have indeed a heavy stake in these barren hills of eastern Minnesota.

There is a widespread idea that the development of iron and steel construction is economising the use of lumber. If it did, the exhaustion of that rapidly disappearing raw material might be delayed for a few years. But, unfortunately, the idea is a delusion. The demand for lumber, instead of diminishing, increases on all hands. The East was long ago stripped of its timber. The great pine forests which skirted the lakes are gradually vanishing. It is cheaper now to haul lumber from the Pacific coast, a distance of eighteen hundred or two thousand miles, than to buy the home-grown article in Wisconsin or

Minnesota. Of late years there has been a rush of lumber buyers to the South, and Florida ships almost as much as Washington or Oregon.

Everywhere exhaustion is rapidly proceeding. In states like Michigan it is almost complete. In Minnesota and Wisconsin it is well in sight. The so-called virgin forest of the Pacific coast is the last resource of the United States, and as other timber areas give out, the drain on it will soon be killing. Its annual shipments east now average 650 million feet of lumber and 5700 million shingles. In addition to that, it exports by sea about 700 million feet of lumber, making the tremendous total of 1350 million feet cut down every year. The white pine areas on the lakes have lowered their annual cut to 4400 million feet. In 1892 it amounted to 8900 million feet, so that in a dozen years it has fallen off one-half. The last pine tract of any size is said to be in the north-east corner of Minnesota, close to the Canadian boundary. It is being attacked on all sides, and no less than ten railways run through it, each of which carries out many millions of feet yearly. One of them hauled out in 1905 the enormous quantity of 250 million feet.

According to a local expert, this great tract of timber is being "fairly gouged out, and in a few years it will all of a sudden collapse as a source of supply." The same authority informs us that

The annual consumption of pine has doubled in ten years, and this in spite of all the talk about the replacement of timber by steel and concrete. The production of white pine lumber in general has long passed its zenith, even in the Duluth district, its last remaining stronghold. It was considered a few years ago that the South had timber for unlimited years. Now the best judges, conservative men, say that the South will be over the crest in less than ten years. The West is the last resort, and its product now goes to Mexico, South Africa, Australia, and Europe. . . . Louisiana, Texas, Alabama, and all the South, are shipping hundreds of million feet yearly to Europe, and supplying vast quantities for home use. Canada is receiving timber by the shipload from Mobile and Pensacola, and the business has grown within three years from nothing to great importance. . . . Present activity in lumber throughout this country was never equalled, and can hardly be surpassed without bringing the end all too soon.

Englishmen are familiar with scientific scares about the exhaustion of their coal-fields, but Americans have not yet begun to feel nervous on that point. It would be easier to scare them about the giving out of their iron ore than of their coal. To see their most important industry pivoted as it were on a patch of ground fifty or sixty miles square is not reassuring. The highest estimate that has been placed on the Minnesota deposits, so far as yet explored, is only 500 million tons. That would be less than fifteen years' ore supply for the whole of the United States at the rates recorded in 1902 (35,504,000 tons) and

in 1903 (35,019,000 tons). It would be less than forty years of the Minnesota output alone.

The coal areas of the United States are of course much larger and more widely distributed than the iron ore. But the output is correspondingly larger, so that the prospect of ultimate exhaustion is not so much more remote as it might seem. In the case of anthracite, it is quite within calculating distance. The principal basin, that in Pennsylvania, has an area of only 484 square miles, and 73 million tons per annum are being taken out of it. Colorado and New Mexico possess the only other anthracite bed—a patch of twenty square miles. Ere many years are over the Americans will have to depend chiefly on bituminous or soft coal. Already it furnishes four-fifths of the annual consumption, the respective quotas in 1904 having been—anthracite, 73,228,000 tons; bituminous, 279,082,000 tons: total 352,310,000 tons.

There are half a dozen bituminous coal-basins in various parts of the country. The largest of them is in the Rocky Mountains, 100,110 square miles. It is not being heavily drawn upon as yet, the output of 1904 having been only 16,338,000 tons, but as the Far West consolidates the demand for coal will grow rapidly. The second largest basin is the Western, extending from the west bank of the Mississippi River to the Indian Territory. Its output in 1904 aggregated 23,273,000 tons. The basin that is by far the

largest producer is only the third in area. This is the Appalachian, which includes Pennsylvania, Ohio, Maryland, Virginia, Eastern Kentucky, Tennessee, Georgia, and Alabama. It covers 70,807 square miles, and produced in 1904 no less than 183 million tons of coal. The Central basin is fourth in size, with 58,000 square miles, and a total output in 1904 of 51,774,000 tons. Both the fifth and sixth are very small basins, the former being on the Pacific coast, and the latter in Virginia and North Carolina. Their respective areas are 1050 and 1070 square miles, and their outputs in 1904 were 3,328,000 tons and 9100 tons.

Any possible estimate of the contents of these vast areas could only be, for the most part, guesswork. However huge a total might be claimed for them, it has to be remembered, on the other hand, that some of them have been worked for the best part of a century, and that the quantity taken out of them increases rapidly year by year. The earliest record, 1820, shows only a few hundred tons of output, which had increased by 1830 to 179,000 tons. It passed a million tons in 1850, but did not get over the ten millions until 1864. Nine years later (1873) it crossed the fifty millions, and in 1883 it recorded its first hundred millions. Since then the increase has been very rapid. The output of 1893 nearly doubled that of 1885. In the next five years another 50 per cent was added, raising the total

output to 309,068,000 tons. The two years 1903-05 showed a further gain of 30 million tons, equal to nearly 10 per cent.

From the older coal-fields immense quantities of coal have been extracted, as the following figures indicate. They represent the aggregate output in each state from the date of the earliest records down to 1904:—

AGGREGATE OUTPUTS OF COAL BY STATES FROM EARLIEST RECORDS TO 1904.

	Tons.
Pennsylvania—	
Anthracite	1696,963,748
Bituminous	1448,233,213
Virginia	44,161,017
Kentucky	93,554,952
Illinois	514,636,696
Ohio	407,376,941
Missouri	85,878,784
Indiana	121,559,055
Alabama	125,509,824
Tennessee	65,468,393
Iowa	119,969,637
Indian Territory	30,417,730
Montana	19,258,283
Maryland	121,506,048
Washington	33,287,055
West Virginia	305,221,093
Colorado	82,940,453
Kansas	71,405,001
Wyoming	59,829,761

Ten states, showing aggregates of less than 20 million tons each, are not specified in the

above list. Including them, the grand total of coal production in the United States, officially recorded down to the end of 1904, was 5578 million tons. At the current rate of, say, 360 million tons per annum, it will take little more than fifteen years to extract another 5578 million tons. Allowing for an increase of only 5 per cent per annum in the outcome, it would take only twelve years to make up a second 5578 million tons. The output of the eighty years from 1822 to 1904 can now be duplicated in less than one-sixth of that time. Even thousands of square miles of coal-beds may, in course of a generation or two, begin to shrink visibly under such terrific destruction.

A coal consumption of four tons per head per annum for 83 millions of people is, needless to say, much more than most countries can afford. Nor can many countries provide themselves with one ton per annum of pig-iron for every five people. But it is with copper that the United States has, of late, been most prodigal. Its copper industry goes back only to the middle of last century. The total output of 1845 was estimated at a nominal 100 tons. In 1852 it reached 1100 tons; in 1867 it made a record of 10,000 tons; in 1877 it crossed 20,000 tons; and in 1833, when the Anaconda came in, it got up to 40,000 tons. Arizona soon followed Montana, and American copper became a serious factor in the market. The following are the chief

landmarks in its phenomenal progress since then:—

UNITED STATES COPPER OUTPUT, 1883-1904.

	Tons.
1883	51,574
1888	101,054
1893	147,033
1898	235,050
1903	311,627
1904	362,729

The most remarkable feature in these sensational increases is the small geographical areas from which they are drawn. American copper is even less widely distributed than iron. There are only three copper states of any importance in the Union. The 362,739 tons produced in 1904 came chiefly from the Lake Superior mines, Montana and Arizona. The respective shares and percentages were:—

	Tons.	Per cent of whole.
Lake Superior	92,995	25·6
Montana	133,168	36·7
Arizona	85,537	23·6
	311,700	85·9

Practically 86 per cent of the whole copper output of the United States was thus obtained from three groups of mines. Here, again, we

find another gigantic industry pivoted on a few patches of metalliferous ground. Outside of Lake Superior, Montana, and Arizona, only two states—California and Utah—are worth mentioning as copper producers. Their respective outputs in 1904 were 14,000 and 23,000 short tons: very small items these in a grand total of 362,000 tons, valued officially at 105 million dollars! Like the Mesabi iron ores, the copper mines were so much new-found wealth for the United States. Their share in the prosperity of the past eight or nine years would be difficult to estimate. Equally so would it be to calculate the opposite effect of their exhaustion.

The United States has not only huge deposits of minerals, but it has greater variety of them than almost any other country. All of them have shared in the recent boom, and had the double benefit of increased output and high prices. A proportionately larger advance has taken place in the annual value of mineral products than of cereals, though farm products, taken as a whole, are still the principal type of American wealth. A quarter of a century ago (1880) the estimated value of all the minerals produced in the United States was 369 million dollars. From 1887 to 1891 it fluctuated between 500 and 600 million dollars. In 1896 it was still only 623 million dollars, but next year a dramatic rise began. That year's valuation was 972 million dollars; 1901 showed 1086 million dollars; 1902

jumped to 1260 millions, and 1903 made a record of 1419 millions, which 1905 has no doubt eclipsed.

Americans may, in the flush of prosperity, find it a little difficult to remember that these millions have all been derived from wasting securities. They can only be got once, and it is hardly the height of wisdom to be in such a hurry as the Americans seem to be to be done with them. Even the precious metals continue to be extracted with feverish haste—for no obvious reason, unless it be to save trouble to posterity. During the first fifty years of the American gold-fields, their output ranged in value from 30 million to 50 million dollars per annum. It was forced up in 1898 to 64½ million dollars, and year by year it has since risen till, in 1905, it exceeded 86 million dollars.

It might almost seem as if the Americans were making a desperate effort to recover their long-lost leadership of the world as gold producers. If their gold output could have maintained the fabulous progress of its first few years, there would have been little need for either the Rand or Kalgurlie. But the 3,144,375 ounces of 1853 continued to be its high-water mark for almost half a century. It was not approached again till 1898, when it was repeated within a few ounces (3,118,398). On the eve of the Civil War the output had fallen to well under two million ounces (1862, 1,896,300). The urgent demand

for gold that naturally attended the greenback *régime* raised the annual total once more, until, in 1866, it reached 2,588,062 ounces. A reaction followed after the war, gold-mining being discouraged by doubts as to when the country might return to a specie basis.

The year 1875 made a low-water mark of 1,615,725 ounces of gold, from which another short rally lifted the output in 1878 to 2,476,800 ounces. Then came the twenty years' silver war, which by another strange paradox had a disastrous effect on gold-mining in the United States. Between 1878, when the Bland Law was passed, and 1893, when Congress formally abandoned its attempt to maintain free silver against the rest of the world, the gold output never reached two million ounces in any single year. Its nearest approach was 1,881,787 ounces in 1879, and its lowest record was 1,451,250 ounces in 1883. In 1895, when the final struggle between sound money and Bryanism was being fought to a finish, gold-mining received a new stimulus. The total of 1895 was 2,254,760 ounces, and from that level a rapid rise set in which in five years made a record. It raised the total to over three million ounces, and the century finished with a return of 3,829,897 ounces for 1900.

We have here a remarkable proof of the natural limitations of the gold-mining industry and of its comparatively narrow range. In half

a century—namely, from 1850 to 1900—the gold output of the United States increased little more than 50 per cent, the respective totals having been 2,418,751 ounces and 3,829,877 ounces. If we take a forty-year period—say, 1850 to 1890—we find a positive retrogression, the output of the latter year having been only 1,588,880 ounces against 2,418,750 ounces in 1850. Recent figures might be even less favourable than they look if strict deduction could be made of all the gold obtained from foreign ores smelted in the United States. How much, for instance, of the gold credited to Alaska really came from the Yukon? And how much of the Colorado total was derived from Mexican ores?

No doubt the natural resources of the United States, and especially its mineral resources, are vast, but it is for the Americans to consider if they are not being used up with suicidal rapidity. President Roosevelt has evidently had his attention drawn to this vital question. It is said to be part of his future programme to recover for the nation the coal and iron lands that have been captured by the trusts. Simply as a check on their wasteful exploitation that would be a most conservative policy.

BOOK IV.—ITS DESTRUCTIVE POWERS.

CHAPTER XVII.

THE "MILLIONAIRE MOLOCH."

THOUGH President Roosevelt is not and never has been a financier, he is one of the most prominent and powerful figures in the financial world to-day. He has entered it not as a reorganiser, or a consolidator, or a merger man, but as a crusader. The late speaker of the House of Representatives, "Tom Reed," said of him in the early part of his career, that he had the greatest pleasure in regarding himself as the discoverer of the Ten Commandments. If "Tom Reed" had lived to witness the President's latest crusade against the "trusts," he might have admitted that the new discoverer of the ten commandments was making good use of them.

In his strenuous championship of the "square deal" against "trust" and "ring" methods, Mr Roosevelt is working himself up to a state of

biblical fervour. He is, unconsciously perhaps, producing an American parallel to the commencement of Josiah's reign over Judah. Josiah's predecessors had, like the Oil and Iron Kings of our own day, "done evil in the sight of the Lord." Among their other iniquities they had served heathen idols, and worshipped them. Close to Jerusalem itself they had set up altars to strange gods,—"to Ashtoreth, the abomination of the Zidonians, to Chemosh, the abomination of the Moabites, and to Moloch, the abomination of the children of Ammon." All these heathen temples the royal reformer Josiah forthwith destroyed. "He brake in pieces the images, and cut down the groves, and filled their places with the bones of men." If Mr Roosevelt were to carry out this Hebrew analogy to the letter, he would have the Chicago packing-houses converted into cemeteries.

The most gruesome of the heathen gods whom Josiah thus rudely disestablished was Moloch. He has been described as a "calf-headed brazen image, in which children were burned alive." In order to reach this terrible death, the victims had to pass through outer circles of fire. The name "Moloch" is thus not one to be used in modern society unless under strong provocation. It has been applied of late to the Chicago meat-packers and other classes of millionaires, who apparently would risk the lives of their fellow-beings rather than miss a dollar of profit.

The "millionaire Moloch" has in the recent fat years been so gorged with sacrifices, that we might expect him to feel satiated, but apparently his appetite grows with what it feeds on. Every new million he devours only makes him more voracious. It is quite possible to conceive of millionaires making good use of their wealth. They may even administer it with greater benefit to society at large than a hundred other men could do were it divided equally among them. They may be, and often are, a conservative factor in the social systems to which they belong. They may even be, though they seldom are, bulwarks of sound finance. But the new race of multi-millionaires in the United States has few such redeeming features.

The "millionaire Moloch," as exhibited in Wall Street and Chicago, is a destructive, not a conservative, force. When a man accumulates only for himself, the chances are that it will be all scattered again at his death. When he sacrifices everybody else to his own enrichment, he is simply a financial Juggernaut. Those whom he tramples down in cold-blooded greed may often be better men than himself, wiser men, and more useful citizens. What does he ever amount to from a public point of view? What is he apart from the millions he heaps up? What effect has the heaping up of millions on his own mind and soul? Let the billion dollar "trusts" of five years ago (1901), the life insur-

ance scandals of last year, and the meat-packing exposures of the past few months, bear witness. They are characteristic landmarks in the progress of the "millionaire Moloch." They show that he is fast losing the elementary qualities of manhood, and becoming a purse-proud ghoul.

"Frenzied finance" is not in my line,—I leave it willingly to my Boston namesake. Neither have I any taste for the horrors of 'The Jungle.' The "millionaire Moloch" is to me a mere freak of high finance, a passing accident of exceptional circumstances and conditions. The worst thing about him is the merciless hold he has got on the staple industries of the country, and on its reserves of raw material. While he retains that hold he has the American people at his mercy. As producers, traders, and consumers, they are completely in his power. If the national reserves of raw material were as unlimited as the spread-eagle American believes them to be, there might be no immediate danger in a monopoly of them. But their exhaustion, or at least a serious diminution of them, is no mere academic question. It may within a generation or two become a business proposition, and have to be treated accordingly.

Some nations die of creeping paralysis, while others prefer the nobler alternative of a general smash up. There is nothing paralytic about American finance, nor is there ever likely to be. But it has vast and varied possibilities of internal

convulsion. Its explosive risks are double those of other nations. They threaten it from above as well as from below. Of the two the anarchists on top are much more dangerous than those at the bottom. The most formidable bomb that has yet been manufactured can spread death and destruction over only a limited area. It is reserved for the millionaire anarchist to make havoc of national interests and industries.

There is no call on us for Rembrandt portraits of Wall Street ogres, or lurid details of their secret conspiracies. Such revelations, whether true or false, can only yield ephemeral gratification to a morbid curiosity. The ogre himself and his future possibilities are the true objects of interest, not his secret manœuvres and adventures. Bearing in mind that essential distinction, I do not turn aside to revel in the "muck-rake" episodes of the past few months. The previous chapters have been written to a running accompaniment of sensational scandals, —life insurance, railroad rebates, Chicago meat-packers, and many other smaller fry. It would have been easy to work up spicy narratives out of such a glut of salacious material, and to offer them as typical of the American finance of to-day. But let us hope that such episodes are only for to-day, and that their blighting influence will not extend far into the future.

On the other hand, it is to be feared that the "millionaire Molochs" have got such a firm

hold, not only on the financial machinery of the United States, but on all the staple trades and industries, that no ordinary effort will ever shake them off. They have so many opportunities of tightening their grip and of stretching out their tentacles farther and farther, that there is no immediate prospect of its being relaxed. The coming generation are probably destined to feel the iron grip of the millionaire monopolist more keenly than any of us have ever done. It is this threatened growth of his malign power that renders him alarming. So far we have only seen him in his cradle, where he has reversed the mythical *rôles* of Hercules and the Serpent. In the American edition of this classical fable it is the Serpent that strangles Hercules. The thrilling question is, What is he to be when full-grown?

Imagination reels at the thought of a second generation of Morgans, Harrimans, and Schwabs wielding inherited millions with an accumulation of inherited skill and daring. The financial feats of their fathers may seem mere child's-play to them,—the rudiments of an art whose evolution has only begun. It will no longer be enough for them to control one or two departments of national life. They will be continually reaching out for more until the whole nation is brought within their toils. I can remember when the modest ambition of a Wall Street banker was to get on the board of a trunk railroad. It was a point

of vantage for him in many ways. When a little "pool" went wrong it could be passed on to the railroad, and when the railroad had anything cheap to sell, another little "pool" could be formed to buy it and dress it up for the public.

The railroad reorganisations of 1894-96 filled not a few pockets in Wall Street to bursting. Wall Street itself was so carried away by the prosperity they helped to create, that stocks had only to be hoisted fast enough in order to attract buyers. New millionaires sprung up faster than mushrooms, while old millionaires found themselves literally overwhelmed by floods of fresh wealth. Anything in the way of financial conjuring became possible. Combinations, conversions, "communities of interest," mergers, pools, syndicates, all called out for some one to come forward and perform them. They were as easy as playing poker, and every one of them had millions in it.

From 1897 to 1903 Wall Street gave itself up to a carnival of financial wizards. It had begun with the railroads, but it did not stop there long. Very soon the insurance companies were drawn into it. The banks, of course, could not resist the temptation. Nor could the trust companies. The churches kept out of it with difficulty, and were much divided in opinion as to the propriety of accepting "tainted money." The hotel lobbies and the drinking-saloons had no theological scruples. They hung over the

ticker as if the fate of the country depended on it. Congress was not indifferent to the great game of speculation going on all around it. Neither Senators nor Representatives were mere academic observers of the rise and fall of prices. The remotest State Legislature exchanged a good deal of wireless telegraphy with New York. The latest development of the speculative fever is said to be among Western farmers. Instead of putting their savings on deposit in the local bank as they used to do, they now entrust them to "a commission house" for a flutter in stocks.

Under the fascination of this wide-spreading craze, the Americans are becoming a nation of speculators. They may retort on us that speculation in wheat and stocks is at least more dignified and rational than universal betting on horse-races. So it is, but it may for that very reason be much more dangerous to the nation. Betting in England is the vice of working men and boys, who have not much to lose by it. Among the educated and propertied classes, it is comparatively rare. Speculation in America is much more extensive. All classes are more or less under its spell, and the amount of money staked on it is beyond comparison larger than what is staked in England on the turf.

Between speculation and betting there is another cardinal difference. Betting is simply a personal vice, the effects of which are limited to the bettors and their families. But wild

speculation of the American sort in land, stocks, produce, and property of every kind, affects the entire community. It diverts trade from its natural course. It disturbs all the normal operations of business. It creates false markets and fictitious prices. It offers an irresistible temptation to organise the industries of the country on a speculative rather than on a commercial basis. Every business concern is capitalised with an eye to Wall Street, and Wall Street too often has the chief voice in its management.

Worst feature of all in a speculative state of society is the predominant power possessed by the moneyed interest. This would be a fatal drawback even if the moneyed interest were scrupulously fair and honest. In any kind of a gamble the long purse has a great advantage over the short purse, from the mere fact of being able to hold out longer. But when the moneyed interest has, as appears to be the case in America, no scruple, no sense of fairness, not even common honesty, to say nothing of moral shame, it becomes a case of professional sharpers against amateur punters. Can there be a shadow of doubt as to the issue?

A rage for colossal speculation must sooner or later bring disaster on any community however wealthy. But colossal speculation conceived in fraud, and inventing new rogueries at every turn, may threaten shame as well as ruin. If the colossal speculators were a class by themselves,

who rooked each other and said no more about it, there would be some hope of their dying out in time. But the Napoleonic operators in Wall Street are not mere gamblers. They are also the financial leaders of the nation, its bank presidents, its railroad directors, and the heads of its great industrial organisations. They have a finger in every pie, social, political, and commercial. Wherever there is an honest profit to be got, they have the first chance of it. But that is not enough for them. They are continually scheming for unfair advantages and secret "pulls" over other traders. The meanest tricks and dodges are resorted to against competitors. And when all else fails, they can stoop to the grossest forms of corruption.

Any self-respecting man would be ashamed to avail himself of all the special advantages which American law heaps on the capitalist as such. If he happens to be a manufacturer he is protected to the extent of 20, 40, 60, or 100 per cent: he gets rebates of 40 or 50 per cent on all the traffic he gives to the railroads: he is allowed a drawback of 90 per cent on all the foreign material he works up and re-exports: he can, if he likes, charge one price for his goods at home and another price abroad. If he is a banker, he can claim a share of the Treasury deposits; he has a free hand to rake in money from the public, and use it for speculation; he is also free to organise speculative pools and

syndicates, to conduct bull campaigns, and to assist in financing his bullish confederates. If he is an insurance director, he can see that his insurance company keeps large cash balances for his bank or his railroad or his soap trust to draw upon for their little deals.

Any reasonable man should be satisfied with such a long start over his competitors. The heathen Chinee could have won every game with only half as many cards up his sleeve as a millionaire operator has all the time. No human being, therefore, has less excuse than the millionaire operator for sharp play. With such chances as his, it should be almost impossible for him to miss anything in sight. The wonder is that he should think it worth his while to be a sharper. As to the fact, however, there can unfortunately be no doubt. One sickening revelation after another demonstrates it. Rather than miss a cent he will bribe, cheat, and lie for it. Formerly he only fleeced the public, but now he poisons them at the same time.

Men of this stamp are the millionaires of Wall Street—the so-called money power of the country. They have a very large proportion of the national wealth in their keeping, and can use or abuse it as they please. The millions they play with are not their own: 70, 80, or it may be as much as 90 per cent of the money is borrowed. They have time loans and call loans running at scores of different banks. One pool they may

finance in New York, another in Boston, and another in Chicago. Apart from these they may have blocks of stock pawned in London, Paris, and Amsterdam. Their simple and innocent rule is to borrow at every open door, and they never stand on matters of form. If they cannot raise a loan they will negotiate a bill or coax an acceptance out of some foreign bank. It is literally true at the present moment that the big plungers in Wall Street have their hands in everybody's pocket. They owe Europe a few hundred million dollars as a small supplement to their home loans.

However many fortunes may be made in this way, no nation can ever be permanently enriched by them. It is more likely to be impoverished, for they are signs of decay and not of progress. They are suicidal elements in national economy. Lest this should be considered too sweeping a judgment, I hasten to qualify it with the remark that it applies only to the Wall Street section of the millionaire oligarchy. There be honest millionaires, doubtless, but not many of them frequent Wall Street. When they go there, it is neither for their health nor for the public good.

Besides being a colossal gambler, the Wall Street millionaire has another peculiarity that bodes ill for the future of the nation. He is a born and ingrained monopolist. His keenest pleasure is to feel that he has left nothing

behind him for any one else. A Rockefeller will spend his whole life in building up a monopoly that defies law and decency alike. He makes himself a human boa-constrictor, whose movements are watched with fascinated horror as he swallows his victims one after the other. A Steel Trust will deliberately set itself to capturing all the chief sources of its raw material, and every year it recounts with pride the thousands of acres of iron deposits that have been added to its territory. It may require only another ten or twenty years to corral all the best iron ore in the United States. By that time, too, all the copper ore worth mining may be in the hands of one omnivorous combine; the cotton crop may be pooled by a Planter's Ring; west of the Mississippi there may be a minimum price for wheat, and the acreage sown may be carefully regulated in order to maintain it.

BOOK IV.—ITS DESTRUCTIVE POWERS.

CHAPTER XVIII.

ITS MUCH MISTRUSTED TRUSTS.

At last we arrive at the crown of the American financial edifice—the modern "trust." It is to be carefully distinguished from the trust company of an older generation, which is a wholly different institution. The latter has done long and honourable service as personal and corporate trustee, with which it nowadays combines certain classes of banking business. Possibly it has assisted in the evolution of its younger rival, but the difference between them is still wide and organic.

The Wall Street species of trust with which we have now to deal is a hybrid as lax in its definition as in its morals. It embraces a considerable variety of sub-species. The speculative "Pool," the underwriting Syndicate, the manufacturing "Ring," and the railroad "Community

of interest," are all in a way "trusts." The essential idea which binds them together is control of markets. To a certain extent this object may be legitimately and honestly pursued. So long as competition is not killed and trade is not unduly restrained, combination for mutual benefit is not objectionable. It may even be in some points commendable. There is no more harm in employers of labour combining for the protection of their markets than in workmen combining for the maintenance of wages. In all advanced states staple industries are more or less pooled. It simply means that competing producers agree on a tariff of prices for standard commodities, as well as on a scale of wages for producing them.

If American "trusts" went no farther than that, they might command sympathy rather than reproach. But they go very much farther, and in the past few years a new kind of finance has been evolved from them altogether at variance with old-fashioned economic doctrines. It diverges widely from these both in theory and in practice. Standards which suited them cannot be applied to it unless with many qualifications and reservations. Other standards must be created specially adapted to it. Lack of these has plunged the American people, and still more foreigners, in a maze of confusion as to the merits of modern "trusts." They are discussed and criticised from many different points of view,

which have little in common with each other. In one criticism we may find them treated from the industrial point of view, in another from the financial point of view, in a third from the ethical standpoint, and in a fourth from the socialistic standpoint.

In the popular mind all these points of view get mixed up together, so that its judgment on trusts becomes a medley of commercial, social, and financial considerations. But the course of events is rapidly educating the people on this burning, and at the same time intricate, question. Its various aspects are being gradually disentangled and examined each in its own light. The modern "trust" is a complex bye-product of American civilisation, which exhibits four or five different phases. We may study it—

First, As an industrial problem.
Second, As a financial problem.
Third, As a political issue.
Fourth, As a Socialistic question.

The phase which specially concerns us here is of course the second. We may in passing touch lightly on the industrial aspect of the subject. That is the one which presented itself most prominently at the outset, and by which everybody was then most strongly impressed. An unparalleled era of universal expansion has hitherto thrown a glamour over the new "trusts," and given them not a little meretricious credit. But this is a relatively small part of the

issue. Even if the claims of the "trusts" to superior efficiency and cheapness of production could be demonstrated, that would settle very little. The financial side of the issue is much larger and more important than the industrial side. The political side, again, is more important than either the industrial or the financial. The socialistic side is beyond comparison the most important of them all.

Our special question is whether or not the modern "trust" has proved itself financially sound. By soundness is here meant something more than mere solvency. It includes the much higher qualities of safety, honesty, and stability. The primary requisite of a trust is of course trustworthiness. The word is from the same root as *truth*, *troth*, and *truce*. Its very essence is loyalty and good faith. An English dictionary defines it as "a reliance or resting of the mind in the integrity, veracity, justice, friendship, &c., of another person." In law every word relative to a trust has to be strictly construed against the trustee, and his responsibility is often enforced to the extent of severe hardship. The idea of trustees becoming powerful enough to set themselves above the law, and to defy it, was never conceived until our own day.

Every joint-stock company is in law and in honour a trust. The larger the company, and the more numerous its shareholders, the more sacred should be the trust. When we get to

corporations, with capitals of from one hundred million dollars to fifteen hundred millions, the shareholder becomes a helpless unit in an ant-heap. There is nothing between him and ruin but the "integrity, veracity, and justice" of the directors and officials. Unfortunately these have never in any known state of society shown themselves proof against even ordinary temptation. Against such almost irresistible temptation as the managers of a huge American trust have every day to face, they are very poor protection indeed. Sooner or later the law has to step in and provide suitable safeguards for security holders who cannot protect themselves.

The "trust" scandals which have of late deluged the United States are due to various causes. The first is the fact of there being no federal law for industrial corporations. Any state in the Union may issue charters by the score, or cancel them for good cause shown. The Federal Government can neither issue a charter nor cancel it. Until President Roosevelt's time it was even doubtful if it could investigate the affairs of a chartered corporation, much less prosecute it. That point, however, is now happily settled, and Mr Roosevelt's Attorney-General is busy investigating trust abuses. But as yet he has not made great progress, or achieved any very substantial result.

Failing an efficient law, the next best bulwark that the American people could have

against dishonest "trusts" would be a strong and healthy public opinion. Unfortunately that has hitherto been wanting also, but there are unmistakable signs that the need of it begins to be felt. So far as the law is concerned, the British public are not much better protected against dishonest corporations than the Americans are. But if it may be said without offence, our moral sentiment is much better developed than theirs in nearly all lines of business. Englishmen have to be not only fairly honest but fairly honourable in their dealings with each other. If they belong to a recognised profession, like solicitors or stockbrokers, they will have to conform strictly to a professional code of honour. In cricket language they will have to "play the game." Even without actual violation of rules they may incur discipline. The committee of the London Stock Exchange spend a great deal of time in deciding delicate questions of fairplay between members. If a member were to be up before them pretty often on points of sharp practice, he would get a hint at the end of the official year not to apply for re-election.

What the English people vaguely call "good form" is often a useful moral guide, and keeps them out of a great deal of trouble. The Americans have no corresponding phrase, and the very idea is unfamiliar to them. The nearest approach to it is President Roosevelt's favourite watchword, "a square deal for every-

body." That is a brave watchword, and young as it is, it has already had an immense effect on public opinion. More than anything else it has helped to raise the moral tone of American politics. It has also set before the people a higher ideal of public life than they were previously accustomed to. That the "trusts" should hate it and its author is perfectly natural, seeing that it subjects them to more exacting standards of judgment.

Formerly the American maxim was to "get there," and if possible to "get there first." Little thought was given to what happened to the other fellows. Whether they fell by the wayside, or were run over and trampled under foot by their stronger competitors, did not matter to the men who "got there." In the American vocabulary there was no such phrase as "live and let live," or "give everybody a chance." The smart man invariably got ahead of the man who was either too simple or too honest to be smart. The mammoth "trusts" were the apotheosis of smart men. They brought into one grand combination all the tariff-fattened manufacturers, the railroad rebaters, the franchise stealers, the competition killers, the Congress corrupters, and the crooked dealers generally.

That is, I fear, a truthful and unexaggerated description of nearly all the modern "trusts." Some of them may not be so bad as others, but in nearly every case the pedigree is tainted.

Not one in a dozen of the financiers who have carried through these huge combinations has a record which honourable men would willingly accept, even with all the millions attached to it. The best that can be said for their industrial efficiency is mere dust in the balance when weighed against the moral charges that have been made against them, and too abundantly proved. This applies with special force to the "trusts," which have grabbed a practical monopoly of the meat supply of the country and some of its most indispensable raw materials.

It was evidently and palpably bad law which allowed a score or so of men to capture 60 per cent of the annual beef-supply, 65 per cent of the petroleum, and about 70 per cent of the output of iron ore. But it was a still greater outrage on civic duty, when these multi-millionaires administered their monopolies with no other thought than to squeeze the last cent they could out of them. Close and careful study of their proceedings for years past has not shown me the slightest trace of respect for the law, duty to the nation, consideration for the public, or fairness toward competitors. The annals of the Standard Oil Corporation and the Beef Trust, especially, are one long sordid record of grab-all. The callous cruelty of such insatiable greed has been worthily matched by business methods made up chiefly of mean frauds practised on a gigantic scale. Like their dollars, their un-

fair advantages have to be reckoned by the million.

Without touching the abstract question of "trusts," or referring to the contradictory opinions that are held in the United States regarding them, we must recognise the gravity of the concrete cases before us. With ten years' experience of them, we may now form at least a provisional judgment on them of some practical value. What have these "trusts" done for American trade, American finance, and American credit? They appear to corrupt them all at the fountain-head, and it is only a question of years when the crime will be completed. Have they not deliberately and systematically defied the Anti-Trust law ever since it was passed in 1890? They have fought tooth and nail, not only in Congress but in every State Legislature, against all attempts to improve the law in the direction of fair-trading. They have lobbied, electioneered, and manœuvred at every opportunity to get undue privileges and advantages for themselves. They have bullied and tyrannised over every trade that came under their yoke. They have, either by trickery or by underselling, or by conspiracy with the railroads, crushed out nearly all the independent dealers who dared to stand up against them.

The official record of these iniquities is full to overflowing, but it continues to grow daily. Much has been added to it by the sensational

investigations of the past twelve months, the insurance scandals, the Chicago packing scandals, the Pennsylvania railroad scandals. Much more is likely to be added by the investigations still in progress. The "muck-rake crusade" is fairly started, and there is no saying where it may end. Already its financial effects are evident in the nervousness and distrust which have seized on Wall Street. A few more yellow sensations of the same sort might give the whole fabric of American credit a shock not easy to get over.

What American credit has to fear most nowadays is not Bryanism, or Socialism, or any of the bogeys of ten years ago. The millionaires, and the millionaire corporations who poured out their wealth like water in order to defeat Bryan, are now themselves the chief public danger. They run a very grave risk of being hoist with their own petard. The Frankenstein they have evoked is more formidable than any free silver Frankenstein could ever have been. The currency scares which high financiers get up now and then are trivial in comparison. In fact, the real object of these to start a false scent is only a little too obvious. The "muck-rake" scandals have become too rank, and they have taken too firm a hold on the public for any theoretical banking question to divert attention from them.

To use an American phrase for which there is no English equivalent, the people are "up against" this trust question in hard earnest. It

has been growing on them for a quarter of a century—the real origin of it having been the organisation of the Standard Oil Company in 1882. They have watched its growth—not always with unfriendly eyes, for the true American loves a hustler, and will forgive him much if "he makes a big thing of it." Success covers a multitude of sins, even large ones. But however indulgent, not to say lax, the moral sense of a community may be, its endurance will have some limit. In this case it has yielded at last to a succession of shocks and outrages continually growing worse.

Already in 1890 the evil was bad enough to challenge the attention of Congress, and an Anti-Trust law, the first of a long series, was then passed. Following the lead of Congress, twenty-seven states and territories "passed statutes with the intention of defining monopoly more closely in order to meet modern conditions."[1] Strenuous efforts have been made to enforce these statutes. Prosecutions without number have been instituted, both by Federal and State authorities, against the most flagrant offenders. The Standard Oil Company and the Beef Trust have been in one court or another most of the time. Their directors have set a fine example to "law-abiding citizens" by snapping their fingers at the courts. They evaded service of subpœnas, they denied jurisdiction, they refused to give evidence or to produce their books. Some of them literally outlawed

[1] Introduction to Report of the Industrial Commission, 1900.

themselves rather than submit to any kind of judicial investigation. The arch monopolist, Mr J. W. Rockefeller, fled to Europe, and others of them are frequently away on yachting tours or foreign holidays.

When it gets to this pitch with the most eminent and powerful citizens in a state, there can only be one issue. The people must fight the monopolists to a finish, and evidently that is what the Americans have made up their minds to do. They have started well under the strenuous leadership of President Roosevelt, who is rallying good citizens around him without distinction of creed or party. Persistently, pertinaciously, and sometimes passionately, he is forcing the issue on Congress. He realises that it is the greatest issue the nation has had to face since the abolition of slavery. Commercial and industrial freedom is as sacred a right of mankind as personal freedom. It is as well worth fighting for, seeing that the future of the nation equally depends upon it. Life and health are at stake in the present fierce uprising against the Beef Trust. Fair trade is at stake in the desperate resistance that is being offered to Standard Oil methods. The national credit is at stake in the efforts of Wall Street to purge itself of the "blind pools" and rigging syndicates which are still rampant there.

For the highest of all reasons—public morality—as well as for the lowest—self-interest—these terrible evils must be checked, and that speedily.

The American people, if they submitted to them much longer, would be considered by their best friends abroad to be condoning them. They would justify the reckless judgment sometimes passed on them by foreigners, that "they are rotten to the core." No people who can work as the Americans do, who delight as they do in the exercise and development of their creative powers, are in great danger of either rotting or rusting. It is only when a nation ceases to be productive, and thinks only of how cheaply it can feed and amuse itself, that rottenness is to be apprehended.

So long as they continue to be the most strenuous race on the face of the globe, the Americans will easily throw off the moral scurf which is now being investigated and exhibited and sensationalised with so much gusto. Like the other yellow sensations which preceded it and had their little day, this one, we may hope, is only skin-deep. In my own time I have seen the American people live down several campaigns of scandal almost as bad as the present one. No doubt they were on a smaller scale, and not so superheated, but they were equally thrilling. Every new generation seems to develop its own peculiar parasites. Sometimes they are municipal boodlers, sometimes they are railroad "bosses," sometimes they are stock riggers. Just now they appear to be "grafters," dishonest trustees, law-defying monopolists, and purveyors of bully beef. They too will have

their little fling, and be swept out into charitable oblivion.

Eighty-three millions of Americans, when thoroughly roused, will make short work of oil-kings and beef-barons who presume to set themselves above the law. Trusts which cannot be trusted will find that they are engaged in a losing battle. It has been fought over and over again before, and the law has always won in the end. It was too much for Jay Gould and his confederates, the most astute financial schemers and the least scrupulous that even Wall Street has ever seen. It may be doubted if there is Gould's equal in the Street at the present moment. Most of the men who are now playing his *rôle* have distinguished themselves more by audacity and rapacity than by financial genius.

There need be little fear as to the ultimate issue of these "trust" scandals. They are but passing clouds on American finance. While they last, however, they must have a sinister influence on everything they touch. Already they have shaken confidence, both at home and abroad, in the integrity of American producers as well as in the soundness of their products. They have tarnished a commercial reputation hitherto among the highest in the world, and shown that the morality of Wall Street is infecting some of the staple industries of the country. For the time being the trail of the trust octopus seems to be over all, and it is neither clean nor wholesome nor reputable.

If there were to be more episodes like the life assurance scandals and the Chicago meat horrors, the effect on American interests abroad might become serious. Every fresh exposure would give an aggravated shock to foreign opinion, no longer very favourably biassed. In the end American securities would be the greatest sufferers. They have so far not merely escaped damage, but seem to have thriven on scandals and earthquakes alike. A long course of booming has made Wall Street consider itself invulnerable, and its foreign allies are only too ready to echo the legend.

But when this legend of Wall Street invulnerability explodes, as it must do sooner or later, American stocks may no longer be bought so freely as they have been in Europe, nor may it be so easy to borrow on them. The discredit into which American business methods have fallen must inevitably extend, for a time at least, to American credit generally. It will check the purchase of American stocks and the negotiation of New York "finance bills." Storms of unprecedented range and violence may even now be brewing on the great ocean of American finance,—storms before which the boldest of its combinations, the most firmly rooted of its monopolies, its farthest-reaching "community of interest," and the most omnivorous of its trusts, may go down like houses of cards.

BOOK IV.—ITS DESTRUCTIVE POWERS.

CHAPTER XIX.

ITS DELUSIVE GOLD RESERVES.

If the question were put to a dozen financial authorities, What do you consider to be the greatest danger to American finance at the present day? at least a dozen different answers would be returned. Most of the bankers might agree with Mr Jacob Scheff, that inelastic currency is the future peril. The majority of plain business men might say, that they were most afraid of a too close alliance between the New York banks and Wall Street. Both of these are undoubtedly serious evils, but for my part I feel greater concern about something much more innocent looking.

It may sound ironical to scent danger in what bankers all over the world are accustomed to consider their sheet-anchor—namely, their gold reserves. It is possible, however, to have too much even of so precious a thing as gold. It is

not only possible but very easy to make a bad use of it. That is what many bankers are now doing, and nowhere else in the world so systematically as in New York. They reverse the true function of gold when they acquire it for the purpose of building up on it a superstructure of speculative credit. By speculative credit I mean credit not actually needed for the legitimate work of commerce or industry. Above and beyond these there is a wide sphere of financial operations which produce a vast amount of paper wealth. There may be little to show for it in the way of tangible assets, but it has a dazzling effect on market prices, bank balances, and official statistics.

These producers of paper wealth are great consumers of gold. Much more gold is employed to-day as margin for speculative bank accounts than as margin for commercial bank accounts. That may look like another paradox, but every intelligent banker knows it to be a truism. It follows as a necessary consequence from the predominance of speculative over commercial operations in all, or nearly all, modern banking. The gold hunger now raging in every monetary centre of the world has nothing to do with currency. The poorest of the gold-standard nations has enough for its *bonâ fide* currency requirements. It is the continual expansion of banking—in other words, of credit operations—that absorbs the millions of gold which appear and disappear in London weekly.

The real reason why so many countries have to complain of the smallness of their gold reserves is not scarcity of gold so much as the excessive development of banking credit. There are two ways of readjusting the balance. Getting more and more gold, and creating four times as much new credit against it, is of course the easiest and most profitable way. The least pleasant and profitable way is to curtail your credits to fit your gold reserves. All nations, conservative and unconservative alike, appear to prefer the easy way. American bankers are decidedly partial to it. They never reduce their volume of credit unless under stress of a crisis. So long as gold can be got at home or abroad for putting up the statutory 25 per cent margin, they go ahead making advances.

This peculiar use of gold reserves is not what the authors of the system intended. It is not in my opinion a proper interpretation of the law. On the contrary, it is an innovation of very questionable character, and fraught with possible evils not only domestic but international. It encourages the New York banks to work up to the limit of safety, if not beyond it, in the hope of always being able to get gold somehow to carry them through. They deliberately assume that London or Paris may always be drawn upon in an emergency. Failing them, there is the Secretary of the Treasury to fall back upon. It has become one of his recognised functions

"to relieve the situation" when the professional financiers have allowed it to get out of hand.

How close to the wind American banks sail in their gold reserves is little suspected, simply because the question has hitherto received so little attention. Naturally most of them consider that they do their full duty in maintaining their 25 per cent or 15 per cent reserve of lawful money, as the case may be. That may be reasonably safe for interior banks whose current requirements of gold are in normal circumstances very trifling. But much more is to be looked for from the great banks of New York, Boston, and Philadelphia which have the international liabilities of the country to take care of. It is indeed surprising, not to say disquieting, to note the narrowness of the specie basis on which they conduct their gigantic operations.

The return now before me of the New York associated banks for the week ended August 18, 1906, shows an aggregate liability on deposits of 1053 million dollars, and on circulation of 46 million dollars — together, 1099 million dollars. The specie on hand averaged for the week 186 million dollars, of which presumably two-thirds was gold,—only 11 per cent of the total liabilities. It is a mere fiction to call that a gold reserve. The New York banks may justly retort on me that the effective gold reserves of the London banks are little, if any, larger. It is true they are also to be taken only in a Pick-

wickian sense. The 15 or 16 per cent of total liabilities at which they figure in the balance-sheets of the banks consist to an unknown but considerable extent of Bank of England notes, of which fully one-third is not covered by gold but only by Government securities. A still larger but also unknown portion of them is represented by current balances in the Bank of England, from 50 to 60 per cent of which the Bank serves up a second time to the money market.

In London as well as in New York the effective gold reserves of the principal banks cannot be said to average over 7 or 8 per cent of their liabilities. There may be other reserves, of course —"lawful money" in New York and gilt-edged securities in London. But these are all outside of the present question, which is the practical efficiency of the gold reserves of the two financial capitals of the world. In comparison with the huge fabric of banking credits which they are supposed to safeguard, they are, in both cases, absurdly slender—so small, in fact, as to be a negligible quantity. In times of stress or emergency, no intellegent banker would put any trust in them or bestow two thoughts upon them.

As cover for their banking liabilities, the gold reserves of London and New York are a delusion and a snare. They invite confidence from the public of which they are utterly unworthy, and which they would certainly betray the moment they were severely tested. This peril, far from

being guarded against, is being hurried to a head by international banking operations which increase the work and the strain thrown on gold reserves confessedly inadequate for their proper duty. Gold is shifted about from one money centre to another, not for *bonâ fide* commercial or financial requirements, but in order to foster a boom in stocks, or to prop up a top-heavy speculative market, or for some other equivocal manœuvre quite outside of legitimate banking business.

Under this new *régime* gold is rapidly becoming the most mischievous and perplexing of gambles. It is now the favourite agent for rigging markets and creating speculative diversions. The gold manipulators are becoming artists at their peculiar work. They no longer buy and sell openly, like honest traders. In London they pick up shipments of gold by stealth, and hide them away for use at the proper psychological moment. For several weeks (August 1906) Lombard Street has been greatly puzzled as to the destination of certain arrivals of gold that mysteriously disappeared from the market. The latest theory is that they were purchased by German banks on New York account, and are being held in London to be shipped in case of emergency. The naïve reason given for this game of mystery is that while New York secures the gold, disturbance of the London money-market is avoided by not shipping it at once!

International banking has much to fear from

its own smartness if this be the direction its development is taking. It will juggle with gold until the jugglers—English, Germans, and Americans—all land in the ditch on top of each other. Meanwhile it is instructive to observe how helpless up-to-date banks can be when they have a bit of a difficulty to face.

The latest piece of American news received as this final chapter goes to press announces the stoppage of the second largest Trust Company in Philadelphia. Though it had only 7½ million dollars of deposits against a paid-up capital and surplus of nearly half as much, it had to be allowed to go to the wall at the risk of precipitating a panic. An emergency meeting of representatives of the principal banks and trust companies in Philadelphia was held before it closed its doors to see if it could be saved. But either it was past help or they were not in a position to help it. Even the three national banks which were its depositaries could not risk more than half a million dollars in trying to save it.

Gold may be able to perform many conjuring tricks in Wall Street and Lombard Street, but it is no safeguard against over-banking or any other form of inflated credit. On the contrary, it is one of the most active and dangerous factors in the present universal inflation of credit.

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